

US Army Corps of Engineers Philadelphia District

Maintenance Dredging

Delaware River

Philadelphia, Pennsylvania to Trenton, New Jersey

Construction Solicitation and Specifications

27 June 2003

CAUTION TO BIDDERS

All information required by the terms of the Solicitation must be furnished. MISTAKES OR OMISSIONS CAN BE COSTLY. Important items for you to check are included in but not limited to those listed below. This checklist is furnished only to assist you in submitting a proper bid. Check as you read.
[] Are you registered in the Central Contractor Database? See DFARS Clause 252.204-7004 "Required Central Contractor Registration" in Section 00700 of this solicitation?
[] Are in compliance with the VETS-100 reporting requirement? See FAR 52. 52.222-37 "Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans in Section" in Section 00700 of this solicitation?
[] Have you acknowledged all amendments? Have you submitted your bid on the latest amended bid schedule?
[] Have you completed the "Representations and Certifications" {Section 00600} portion of the Solicitation? Is your Contractor Establishment Code listed on the Standard Form 1442?
[] Is your bid properly signed by an officer of your company?
[] If a bid guarantee is required, is it included with your bid and is it in the proper amount? {Usually 20 percent of the total bid price, including any options or additives.} If your bid guarantee is in the form of a bid bond, is the bond properly signed by both the bidder and surety (BONDING DOCUMENTS SHOULD BEAR AN ORIGINAL SIGNATURE BY AN OFFICER OF THE SURETY) and are all required seals affixed? A bid guarantee is required when your bid exceeds \$100,000.00. A late bid guarantee is treated the same as a late bid.
[] Is the name in which you submitted the bid the same on your bid as on the bid bond?
[] If required, have you entered a unit price for each bid item? {The solicitation will specifically state when this is necessary.}
[] The Government may reject a bid as nonresponsive if it is materially and mathematically unbalanced as to price for any bid item or combination of items. A bid is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.
[] Are decimals in unit prices in the proper places? Are your figures legible?
[] Are the extensions of your unit prices, and your total bid price correct?
[] Are all erasures or corrections initialed by the person signing the bid?
[] Have you restricted your bid by altering the provisions of the solicitation?
[] If you are a large business and your bid is greater than \$500,000 for service or \$1,000,000.00 for construction have you included your Sub-Contracting Plan in your bid package? (NOTE: PLEASE REFER TO SUBCONTRACTING PLAN IN SOLICITATION FOR GOALS).
[] Is the envelope containing your bid properly identified that it is a sealed bid and does it contain the correct solicitation number and bid opening time?
[] Will your bid arrive on time? See paragraph entitled "Late Submissions, Modifications, and Withdrawals of Bids" in the Instructions to Bidders {Section 00100} of the solicitation.
February 27, 2003

INVITATION NO. DACW61-03-B-0008

PHILADELPHIA DISTRICT CORPS OF ENGINEERS

INVITATION FOR BIDS FOR

MAINTENANCE DREDGING

DELAWARE RIVER
PHILADELPHIA, PENNSYLVANIA
TO
TRENTON, NEW JERSEY

- I. NOTE THE AFFIRMATIVE ACTION REQUIREMENT OF THE EQUAL OPPORTUNITY CLAUSE WHICH MAY APPLY TO THE CONTRACT RESULTING FROM THIS SOLICITATION.
- II. BIDDERS ARE REQUIRED TO COMPLETE THE REPRESENTATION AND CERTIFICATIONS PORTION OF SECTION 00600 OF THIS SOLICITATION AND SUBMIT THIS WITH THEIR BID.

MAIN TABLE OF CONTENTS SOLICITATION, OFFER, AND AWARD (SF 1442)

SECTION	TITLE	PAGE NOS.
00010	SF 1442 AND BIDDING SCHEDULE	00010-1 to 00010-3
00100	INSTRUCTIONS, CONDITIONS, AND NOTICE TO BIDDERS	00100-1 to 00100-7
00600	REPRESENTATIONS AND CERTIFICATIONS AND OTHER STATEMENTS OF BIDDERS	00600-1 to 00605-7
00700	CONTRACT CLAUSES	00700-1 to 00700-97
00800	SPECIAL CONTRACT REQUIREMENTS	00800-1 to 00860-92
	SPECIFICATIONS	01010-1 to 05900-5

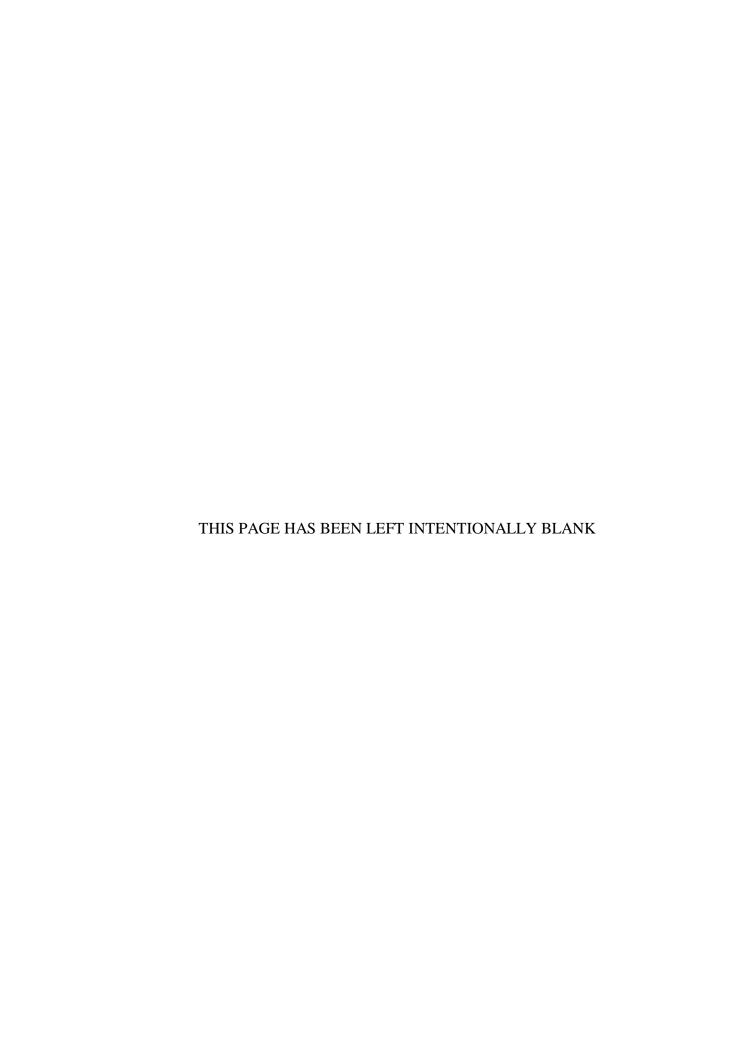
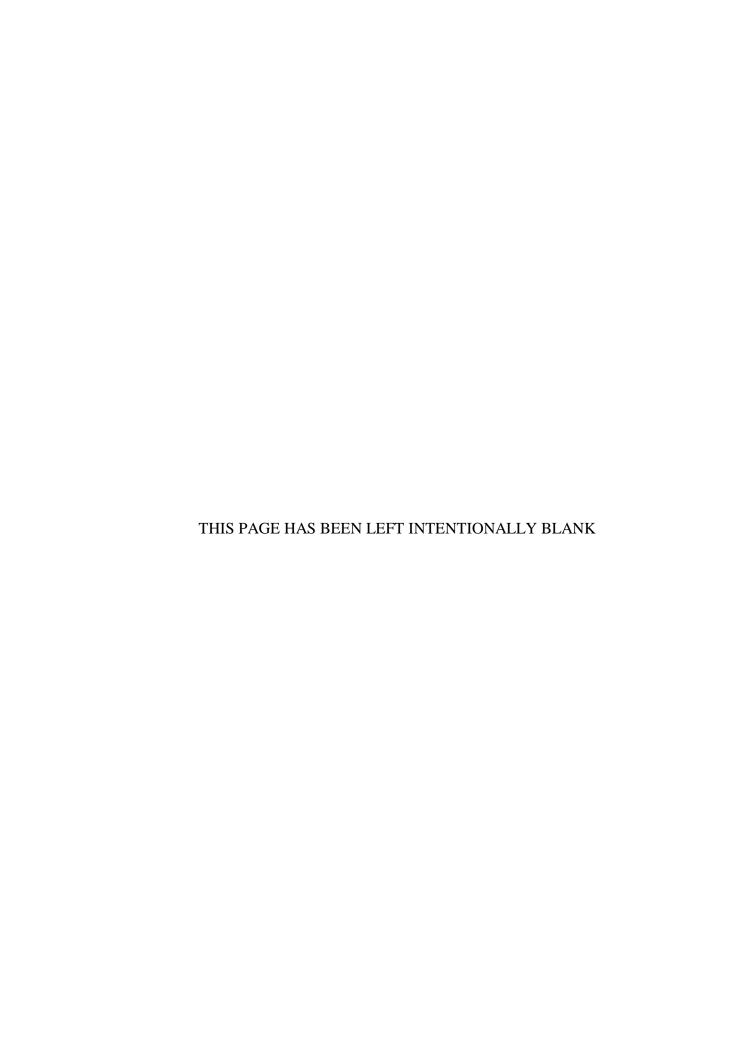


TABLE OF CONTENTS SECTION 00010

TITLE PAGE NOS.

SOLICITATION, OFFER & AWARD (SF 1442)

BIDDING SCHEDULE 00010-1 to 00010-3



SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NO. DACW61-03-B-0008	2. TYPE OF SOLICITATION SEALED BID (IFB) NEGOTIATED (RFP)	3. DATE ISSUED 6/27/03	PAGE OF PAGES
IMPORTANT - The "offer" section on the r	everse must be fully compl	eted by offeror.		
4. CONTRACT NO.	5. REQUISITION/PURCHASE RE W25PHS-3034-6860	QUEST NO. 6. PROJE	T NO.	
7. ISSUED BY CODE		ADDRESS OFFER TO		A STATE OF THE STA
US Army Engineer District, Philadelphia Wanamaker Building, 100 Penn Square East Philadelphia, Pennsylvania 19107-3390		ADDRESS OFFER TO		
9. FOR INFORMATION A. NAME CALL: Maureen Jordan		B. TELEPHONE NO. (Include an	ea code) (NO COLLECT CA 15-656-6763	LLS)
	SOLICITAT	ION	13-030-0703	
NOTE: In sealed bid solicitations "offer	r" and "offeror" mean "b	id" and "bidder".		
10. THE GOVERNMENT REQUIRES PERFORMANCE OF	THE WORK DESCRIBED IN THESE	DOCUMENTS (Title, identifying no.,	late):	
SOLICITATION NUMBER: DACW61-03-	B-0008			
PROJECT TITLE: Maintenance Dredging,	Delaware River, Philadelpi	a to Trenton		
ISSUE DATE: 27 June 2003				
BID OPENING DATE: 29 July 2003 at 11:	00 a.m.		되다 가는 살길	
THIS PROCUREMENT IS UNRESTRICTE			기가 계속되는 것이다. 15 - 이번 18 - 19 1일	
			n de la companya de La companya de la co	
				La Carlo San Carlo
	er were transported to the second of the sec			
11. The Contractor shall begin performance with		and complete it within See	C-1 calendar day	s after receiving
award, notice to proceed. This pe	rformance period is 🔀 ma	ndatory, negotiable. (See	,
12A. THE CONTRACTOR MUST FURNISH ANY REQUIRE (If "YES," Indicate within how may calendar days after as	ED PERFORMANCE AND PAYMEN ward in tem 128.)	r Bonds?	128. CALENDAR DAYS	
X YES NO			10	
13. ADDITIONAL SOLICITATION REQUIREMENTS:				
A. Sealed offers in original and 1 copies: local time (date). I containing offers shall be marked to show the	If this is a sealed bid solicitation	are due at the place specified in on, offers will be publicly opene he solicitation number, and the	at that time Sealed	envelonee
B. An offer guarantee 🔀 is, 🔲 is not required				
C. All offers are subject to the (1) work requirer reference.	nents, and (2) other provision	s and clauses incorporated in th	e solicitation in full te	xt or by
D. Offers providing less than 60 calc	endar days for Government ac	ceptance after the date offers a	re due will not be con	sidered and

44 NAME IN THE RESERVE		OFFE	R <i>(Must be</i>	fully complete	d by offeror)				- 14-1-1
14. NAME AND ADDRESS	OF OFFEROR (Include ZIP Cod	le)			HONE NO. (Incl.	ude area code)			
				42 22					
			e de la companya de l	16. REMIT	TANCE ADDRES	SS (Include only	if different than	lem 14)	
CODE	FACILITY CODE		 	_			135		
17. The offeror agrees to	perform the work required at the writing within cal	he prices	specified belo	W In strict soco	danaa salah at				
by the Government in	writing within cal. Failure to insert any number mea	ender day	s after the da	te offers are du	. (Insert any nun	iber equal to or	olicitation, if th <i>ereater than the</i>	ils Offer is acce	pted
1	. Failure to insert any number mea	ins the offer	ror accepts the i	minimum in Item .	13D.	• • • • • • • • • • • • • • • • • • • •			
AMOUNTS								\$	
10 71 66									
18. The offeror agree	es to furnish any required	d perfor	mance and	payment be	onds.				
		9. ACK	NOWLEDG	MENT OF A	MENDMENT				
	(The offeror acknowledge	s receip	of amendm	ents to the sol	citation - give	number and	date of each)	
MENDMENT NO.								T	T
DATE						ļ		 	
	3				à.				
(Type or print)	PERSON AUTHORIZED TO SIG	N OFFER		20B. SIGNA	TURE			20C. OFFER	DATE
									-,
	A	WARD	(To be con	mnleted by I	Government)				
1. ITEMS ACCEPTED:				inproted by	overninerit)	-			
							**		
				The Park to					**
2. AMOUNT		-,	23. ACCO	UNTING AND	APPROPRIAT	ION DATA		***	
						ION DATA			
4. SUBMIT INVOICES TO A	DDRESS SHOWN IN	1,754		T					
(4 Copies unless other	rwise specified)	ITEA	1	25. OTHER T	HAN FULL AND S.C 2304(c) (
3. ADMINISTERED BY	CODE				T WILL BE MAD) 4 FRY	1 U.S.C 253	(c) ()	
		4							
		- iva -							
7	CONTRACTING O	FFICER	WILL CON	IPLETE ITEN	1 28 OR 29	AS APPLICA	ABLE.		
	EMENT Contractor is required to s	sign this		29. AW.	ARD (Contractor	is not required t	o cian this down	mant) Varia	-44
men anim mattact all IfBIUS OL	copies to issuing office.) Comparform all work requirements	information of		I OU THIS SOUCH	ation is hereby contract, which	accented se +	- +b ! !!-		
" and any continuation sue	ets for the consideration stated the parties to this contract shall	in this		your offer, as necessary.	nd (b) this cont	ract award.	No further cor	iment solicitati itractual docur	on and nent is
And Courtact BANGLO' (D) Ine solicitation and (a)	1 +h_ =							
ittached to this contract.	and specifications incorporated	by refere	ence in			$c = \{ c_{x_{n-1}, 1}^{(i)}, \cdots, c_{i}^{(i)} \}$. .		
A. NAME AND TITLE OF CO	ONTRACTOR OR PERSON AUT	UOSIT		<u> </u>			<u> </u>		
TO SIGN (Type or print)	Z ON ON PERSON AUT	HURIZED		31A. NAME O	FCONTRACTIN	G OFFICER (ype or print)		
B. SIGNATURE		30C. D.	ATE	31B. UNITED	STATES OF AME	ERICA		310 4	WARD
	Constitution of the consti	1		BY				31C. A	ATE
				٧.					

BIDDING SCHEDULE (To be attached to Standard Form 1442)

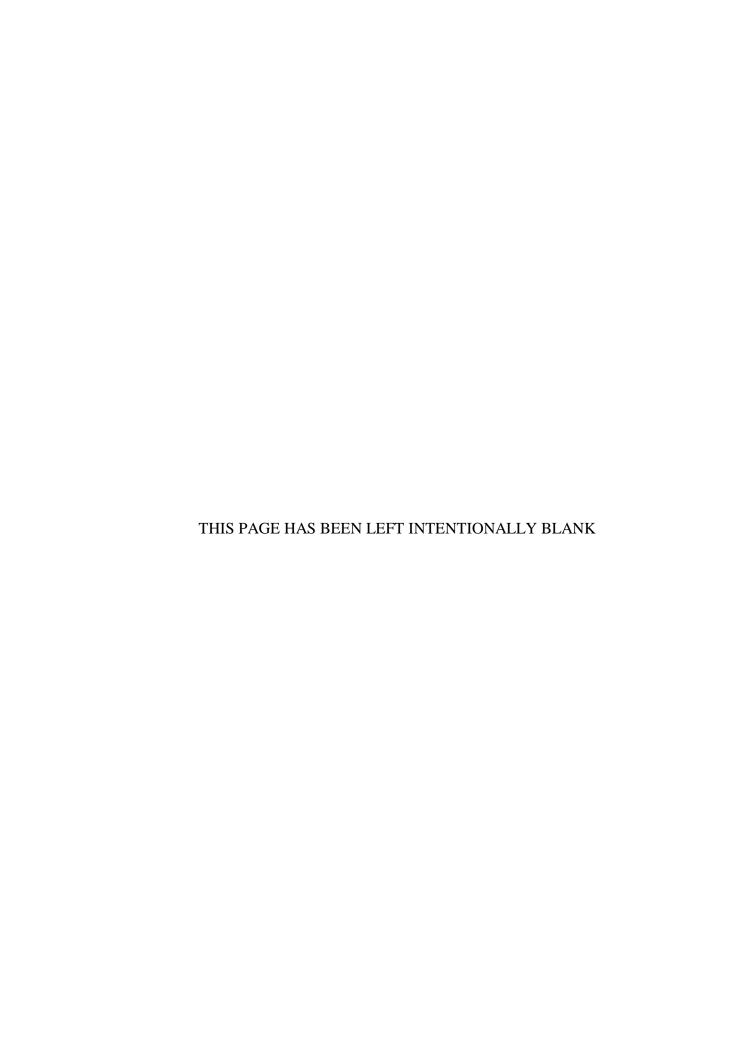
Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
1.	Mobilization and Demobilization	1	Job	L.S.	\$
2.	Removal & Satisfactory Disposal of Material	739 , 975	C.Y.	\$	\$
3.	Disposal Area Development Constr	ruction			
3a.	Palmyra Disposal Area Developmer	nt 1	Job	L.S.	\$
3b.	Hawk Island Disposal Area Develo	opment 1	Job	L.S.	\$
3c.	Burlington Island Disposal Area Developments	1	Job	L.S.	\$
3d.	Money Island Disposal Area Devel	opment 1	Job	L.S.	\$
3e.	Biles Island Disposal Area Devel	opment 1	Job	L.S.	\$
	Adjustment in bid price if Contractor-furnished disposal areas, described as hereinafter specified, are used, deduct	1	Job	L.S.	\$ ()
	TOTAL ES	STIMATED AM	OUNT		\$

ACCEPTANCE OF ADJUSTMENT FOR CONTRACTOR-FURNISHED DISPOSAL AREAS: Award of the contract on the basis of using Contractor furnished disposal areas will be subject to the acceptance of these disposal areas by the Contracting Officer. The Contractor shall be required to obtain all applicable Federal and State approvals as specified in SECTION: COORDINATION FOR CONTRACTOR-FURNISHED DISPOSAL AREAS of the Specifications. Failure by the bidder to furnish these approvals with the bid at the time of the bid opening will result in the bid for use of the Contractor-furnished disposal areas to be rejected as being non-responsive.

If the bidder proposes to use disposal areas other than those stipulated in the specifications, an adjustment in the bid price based on acceptance of the Contractor-furnished areas shall be entered as an adjustment item in the Bidding Schedule and the net total bid price. If the bid is based on the use of Contractor-furnished areas, the bidder shall execute DESCRIPTION OF DISPOSAL AREAS form, complete in accordance with the notations thereon, and shall submit the form with the bid. The bid shall adequately describe such Contractor-furnished areas and shall be accompanied by the written permission of the land owners. Description of Contractor-furnished areas shall include location, size and capacity of each area. If the bidder proposes to use both the Government-furnished areas shown on the contract drawings and Contractor-furnished areas, he shall describe in his bid the portion or portions of all the areas which will be used and the estimated quantity of dredged material to be placed in each area.

Section 00100 - Bidding Schedule/Instructions to Bidders

52.204-6	Data Universal Numbering System (DUNS) Number	JUN 1999
52.214-3	Amendments To Invitations For Bids	DEC 1989
52.214-4	False Statements In Bids	APR 1984
52.214-5	Submission Of Bids	MAR 1997
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999
52.214-9	Failure To Submit Bid	JUL 1995
52.214-18	Preparation of Bids-Construction	APR 1984
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.214-5000	Apparent Clerical Mistakes	MAR 2000
52.216-1	Type Of Contract	APR 1984
52.222-23	Notice of Requirement for Affirmative Action to Ensure	FEB 1999
	Equal Employment Opportunity for Construction	
52.232-38	Submission of Electronic Funds Transfer Information with	MAY 1999
	Offer	
52.233-2	Service Of Protest	AUG 1996
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991



52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

- (a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address exactly as stated in the offer.
- (b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:
- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.
- (c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at http://www.customerservice@dnb.com. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com.

(End of provision)

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)

- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting a bid, (3) by letter or telegram, or (4) by facsimile, if facsimile bids are authorized in the solicitation. The Government must receive the acknowledgment by the time and at the place specified for receipt of bids.

(End of provision)

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)

Bidders must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001. (End of provision)

52.214-5 SUBMISSION OF BIDS (MAR 1997)

- (a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.
- (b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when delivered to the office specified in the solicitation.
- (c) Telegraphic bids will not be considered unless authorized by the solicitation; however, bids may be modified or withdrawn by written or telegraphic notice.
- (d) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.
- (e) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

(End of provision)

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)

Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders before the submission of their bids. Oral explanations or instructions given before the award of a contract will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an amendment to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

(End of provision)

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999)

- (a) Bidders are responsible for submitting bids, and any modifications or withdrawals, so as to reach the Government office designated in the invitation for bids (IFB) by the time specified in the IFB. If no time is specified in the IFB, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that bids are due.
- (b)(1) Any bid, modification, or withdrawal received at the Government office designated in the IFB after the exact time specified for receipt of bids is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late bid would not unduly delay the acquisition; and--
- (i) If it was transmitted through an electronic commerce method authorized by the IFB, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of bids; or
- (ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of bids and was under the Government's control prior to the time set for receipt of bids.
- (2) However, a late modification of an otherwise successful bid that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

- (c) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the bid wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (d) If an emergency or unanticipated event interrupts normal Government processes so that bids cannot be received at the Government office designated for receipt of bids by the exact time specified in the IFB and urgent Government requirements preclude amendment of the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (e) Bids may be withdrawn by written notice received at any time before the exact time set for receipt of bids. If the IFB authorizes facsimile bids, bids may be withdrawn via facsimile received at any time before the exact time set for receipt of bids, subject to the conditions specified in the provision at 52.214-31, Facsimile Bids. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for receipt of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

(End of provision)

52.214-9 FAILURE TO SUBMIT BID. (JUL 1995)

Recipients of this solicitation not responding with a bid should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements.

(End of provision)

52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

- (a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.
- (b) The bid form may require bidders to submit bid prices for one or more items on various bases, including-
- (1) Lump sum bidding;
- (2) Alternate prices;
- (3) Units of construction: or
- (4) Any combination of subparagraphs (1) through (3) above.
- (c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.
- (d) Alternate bids will not be considered unless this solicitation authorizes their submission.

(End of provision)

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996)

- (a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government, considering only price and the price-related factors specified elsewhere in the solicitation.
- (b) The Government may reject any or all bids, and waive informalities or minor irregularities in bids received.
- (c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the bid.
- (d) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

(End of provison)

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995)--EFARS

- (a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:
 - (1) Obviously misplaced decimal points will be corrected;
 - (2) Discrepancy between unit price and extended price, the unit price will govern;
 - (3) Apparent errors in extension of unit prices will be corrected;
 - (4) Apparent errors in addition of lump-sum and extended prices will be corrected.
- (b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

(End of statement)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed-price contract resulting from this solicitation.

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

- (a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.
- (b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
17.3% - Philadelphia 16.4% - Trenton	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

- (c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.
- (d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --
- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract:
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.
- (e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is in the States of

Pennsylvania and New Jersey, the Counties of Philadelphia and Trenton, and the Cities of Philadelphia and Trenton. (End of provision)

52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (MAY 1999)

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration.

- (1) The solicitation number (or other procurement identification number).
- (2) The offeror's name and remittance address, as stated in the offer.
- (3) The signature (manual or electronic, as appropriate), title, and telephone number of the offeror's official authorized to provide this information.
- (4) The name, address, and 9-digit Routing Transit Number of the offeror's financial agent.
- (5) The offeror's account number and the type of account (checking, savings, or lockbox).
- (6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.
- (7) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on-line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

(End of provision)

52.233-2 SERVICE OF PROTEST (AUG 1996)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer by obtaining written and dated acknowledgment of receipt from Mrs. Linda M. Toth, Chief, Contracts Branch, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.
- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

- (a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --
- (1) Furnishing all plant, labor, equipment, appliances, and materials; and
- (2) Performing all operations required to complete the work in conformity with the drawings and specifications.
- (b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.



Section 00600 - Representations & Certifications

52.203-2	Certificate Of Independent Price Determination	APR 1985
52.203-11	Certification And Disclosure Regarding Payments To	APR 1991
	Influence Certain Federal Transactions	
52.204-3	Taxpayer Identification	OCT 1998
52.204-5	Women-Owned Business (Other Than Small Business)	MAY 1999
52.209-5	Certification Regarding Debarment, Suspension, Proposed	DEC 2001
	Debarment, And Other Responsibility Matters	
52.219-1 Alt I	Small Business Program Representations (Apr 2002)	APR 2002
	Alternate I	
52.219-2	Equal Low Bids	OCT 1995
52.219-19	Small Business Concerns Representation For The Small	OCT 2000
	Business Competitiveness Demonstration Program	
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-22	Previous Contracts And Compliance Reports	FEB 1999
52.222-38	Compliance With Veterans' Employment Reporting	DEC 2001
	Requirements	
52.223-13	Certification of Toxic Chemical Release Reporting	OCT 2000
252.247-7022	Representation Of Extent Of Transportation Of Supplies By	AUG 1992
	Sea	

Section 00605

Small, Veteran-Owned Small, Service-Disabled Veteran-Owned Small, Hubzone Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan



Section 00600 - Representations & Certifications

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

- (a) The offeror certifies that --
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –
- (i) Those prices,
- (ii) The intention to submit an offer, or
- (iii) The methods of factors used to calculate the prices offered:
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory --
- (1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or
- (2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provison ______ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);
- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.
- (c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in

paragraph (b) of this Certification.

- (b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--
- (1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and
- (3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.
- (c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

with IRS records to verify the accuracy of th
(d) Taxpayer Identification Number (TIN).
TIN:

TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);
Government entity (Federal, State, or local);
Foreign government;
International organization per 26 CFR 1.6049-4;
Other
(f) Common parent.
Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
Name and TIN of common parent:
Name
TIN
(End of provision)

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

- (a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.
- (b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it () is a women-owned business concern.

(End of provision)

52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)

- (a)(1) The Offeror certifies, to the best of its knowledge and belief, that-
- (i) The Offeror and/or any of its Principals--
- (A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
- (B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
- (C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.
- (ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 237990.
(2) The small business size standard is \$17.0 million.
(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
(b) Representations. (1) The offeror represents as part of its offer that it () is, () is not a small business concern.
(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124.1002.
(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.
(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a veteran-owned small business concern.
(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it () is, () is not a service-disabled veteran-owned small business concern.
(6) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that
(i) It () is, () is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and
(ii) It () is, () is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.
(7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.) The offeror shall check the category in which its ownership falls:
Black American.
Hispanic American.

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002) - ALTERNATE I (APR

2002)

Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).
Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).
Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).
Individual/concern, other than one of the preceding.
(c) Definitions. As used in this provision
Service-disabled veteran-owned small business concern
(1) Means a small business concern
(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).
"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.
Veteran-owned small business concern means a small business concern
(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
(2) The management and daily business operations of which are controlled by one or more veterans.
"Women-owned small business concern," means a small business concern
(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; or

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Whose management and daily business operations are controlled by one or more women.

- (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--
- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-2 EQUAL LOW BIDS. (OCT 1995)

- (a) This provision applies to small business concerns only.
- (b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

-

(c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

- (b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [] is, [] is not an emerging small business.
- (c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues
50 or fewer \$1 million or less
51 - 100 \$1,000,001 - \$2 million
101 - 250 \$2,000,001 - \$3.5 million
251 - 500\$3,500,001 - \$5 million
501 - 750 \$5,000,001 - \$10 million
751 - 1,000\$10,000,001 - \$17 million
Over 1,000 Over \$17 million
(End of provision)
52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)
(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.
(End of clause)
52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)
The offeror represents that
(a) () It has, () has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
(b) () It has, () has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed

subcontractors, will be obtained before subcontract awards.

(End of provision)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (DEC 2001)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

- (a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.
- (b) By signing this offer, the offeror certifies that--
- (1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or
- (2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)
- () (i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
- () (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);
- () (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- () (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or
- () (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(End of clause)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

_____(1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

_____(2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether

(End of provision)

SMALL, VETERAN-OWNED SMALL, SERVICE-DISABLED VETERAN-OWNED SMALL, HUBZONE SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN

DATE:
CONTRACTOR: ADDRESS: SOLICITATION OR CONTRACT NUMBER: ITEM/SERVICE:
1. (a) The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) are applicable to the contract cited above or to the contract awarded under the solicitation cited.
(i) Small Business Concerns:% of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns.
(ii) Veteran-Owned Small Business Concerns: % of total planned subcontracting dollars under this contract will go to subcontractors who are veteran-owned small business concerns.
(iii) Service-Disabled Veteran-Owned Small Business Concerns:% of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business concerns.
(iv) HUBZone Small Business Concerns: % of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns located in a historically underutilized business zone which is an area located within one or more qualified census tracts, qualified nonmetropolitan counties, or lands within the external boundaries of an Indian reservation and appear on the List of Qualified HUBZone Small Business Concerns maintained by the SBA. (http://www.sba.gov/hubzone/).
(v) Small Disadvantaged Business Concerns:% of total planned subcontracting dollars under this contract will go to subcontractors who are small concerns owned and controlled by socially and economically disadvantaged individuals. This percentage is included in the percentage shown under 1.(a)(i) above, as a subset.
(vi) Women-Owned Small Business Concerns:% of total planned subcontracting dollars under this contract will go to subcontractors who are women-owned small business concerns. This percentage is included in the percentage shown under 1.(a)(i) above, as a subset.
(b) The following dollar values correspond to the percentage goals shown in (a) above.

(i) Total dollars planned to be subcontracted to small business concerns:

\$
(ii) Total dollars planned to be subcontracted to veteran-owned small business concerns: \$
(iii) Total dollars planned to be subcontracted to service-disabled veteran-owned small business concerns: \$
(iv) Total dollars planned to be subcontracted to HUBZone small business concerns: \$
(v) Total dollars planned to be subcontracted to small disadvantaged business concerns: \$ This dollar amount is included in the amount shown under 1.(b)(i) above, as a subset.
(vi) Total dollars planned to be subcontracted to women-owned small business concerns: \$ This dollar amount is included in the amount shown under 1.(b)(i) above, as a subset.
(c) The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this contract is \$
(d) The following principal products and/or services will be subcontracted under this contract and the distribution among small, veteran-owned small, service-disabled veteran-owned small, HUBZone small business, small disadvantaged, and women-owned small business concerns is as follows:
(Products/services planned to be subcontracted to small business concerns are identified by *, veteran-owned small business concerns by **, service-disabled veteran-owned small by ***, HUBZone small business concerns by ****, small disadvantaged business concerns by ***** and women-owned small business concerns by *****)

(Attachment may be used if additional space is required)

(e) The following method was used in developing subcontract goals (i.e., statement explaining how the product and service areas to be subcontracted were established, how the areas to be subcontracted to small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business concerns were determined, and how small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business concerns capabilities were determined, to include identification of source lists utilized in making those determination).

(f) Indirect and over head costs [] have [] have not been included in the goals specified in 1(a) and 1(b).
(g) If "have" is checked, explain the method used in determining the proportionate share of indirect and overhead cost to be allocated as subcontracts to small business concerns, veteranowned small, service-disabled veteran-owned small, service-disabled veteran-owned small, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.
2. The following individual will administer the subcontracting program:
Name:Address & Telephone:
This individual's specific duties, as they relate to the firm's subcontracting program are as

follows:

General overall responsibility for this company's Small Business Program, the development, preparation and execution of individual subcontracting plans and for monitoring performance relative to contractual subcontracting requirements contained in this plan, including but not limited to:

- (a) Developing and maintaining bidders lists of small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business concerns from all possible sources.
- (b) Ensuring that procurement packages are structured to permit small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business concerns to participate to the maximum extent possible.
- (c) Assuring inclusion of small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business concerns in all solicitations for products or services which they are capable of providing.
- (d) Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business participation.

- (e) Ensuring periodic rotation of potential subcontractors on bidders lists.
- (f) Ensuring that the bid proposal review board documents its reasons for rejecting low bids submitted by small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business concerns.
- (g) Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.
- (h) Attending or arranging for attendance of company counselors at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.
- (i) Conducting or arranging for conduct of motivational training for purchasing personnel pursuant to the intent of P.O. 95-507.
 - (j) Monitoring attainment of proposed goals.
 - (k) Preparing and submitting periodic subcontracting reports required.
- (l) Coordinating contractor's activities during the conduct of compliance reviews by Federal Agencies.
- (m) Coordinating the conduct of contractor's activities involving its small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business subcontracting program.

(n) Additions to (or deletions from) the duties specified above are as follows:

- 3. The following efforts will be taken to assure that small, veteran-owned small, service-disabled veteran-owned small, HUBZone, small, small disadvantaged, and women-owned business concerns will have an equitable opportunity to compete for subcontracts:
 - (a) Outreach efforts will be made as follows:
 - (i) Contacts with minority and small business trade associations
 - (ii) Contacts with business development organizations
 - (iii) Attendance at small and minority business procurement conferences
 - (iv) Sources will be requested from SBA's PASS system.

(b) The following internal efforts will be made to guide and encourage buyers: (i) Workshops, seminars and training programs will be conducted (ii) Activities will be monitored to evaluate compliance with this subcontracting plan. (c) Small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business concern source lists, guides and other data identifying small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business concerns will be maintained and utilized by buyers in soliciting subcontracts. (d) Additions to (or deletions from) the above listed efforts are as follows: 4. The bidder (contractor) agrees that the clause entitled Utilization of Small, veteran-owned small, service-disabled veteran-owned small, HUBZone Small, Small Disadvantaged, and Women-Owned Small Business Concerns will be included in all subcontracts which offer further subcontracting opportunities, and all subcontractors except small business concerns who receive subcontracts in excess of \$500,000 will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting

5. The bidder (contractor) agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small business Administration in order to determine the extent of compliance by the bidder with the subcontracting plan and with the clause entitled Utilization of Small, veteran-owned small, service-disabled veteran-owned small, HUBZone Small, Small Disadvantaged, and Women-Owned Small Business Concerns, contained in the contract

plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-

case basis depending on the supplies/services involved, the availability of potential small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small

disadvantaged, and women-owned subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable

6. The bidder (contractor) agrees that he will maintain at least the following types of records to document compliance with this subcontracting plan:

records and subcontracting program progress.

- (a) Small, veteran-owned small, service-disabled veteran-owned small, HUBZone Small, Small Disadvantaged, and Women-Owned Business concern source lists, guides and other data identifying SB/HZSB/SDB/WO vendors.
- (b) Organizations contacted for small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned business sources.
- (c) On a contract-by-contract basis, records on all subcontract solicitations over \$100,000, indicating on each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether veteran-owned small business concerns were solicited, and if not, why not, (3) whether service-disabled veteran-owned small business concerns were solicited, and if not, why not; (4) whether HUBZone small business concerns were solicited, and if not, why not; (5) whether small disadvantaged business concerns were solicited, and if not, why not; (6) whether women-owned business concerns were solicited and if not, why not; and (7) reasons for the failure of solicited small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, or women-owned business concerns to receive the subcontract award.
- (d) Records to support other outreach efforts: Contacts with Minority and Small Business Trade Associations, etc. Attendance at small and minority business procurement conferences and trade fairs.
- (e) Records to support internal activities to guide and encourage buyers: Workshops, seminars, training programs, etc. Monitoring activities to evaluate compliance.
- (f) On a contract-by-contract basis, records to support subcontract award data to include name and address or subcontractor .

(g) Records to be maintained in addition to the above are as follows:				
Signed:	_			
Plan Accepted By:Contracting Officer				
Date:				

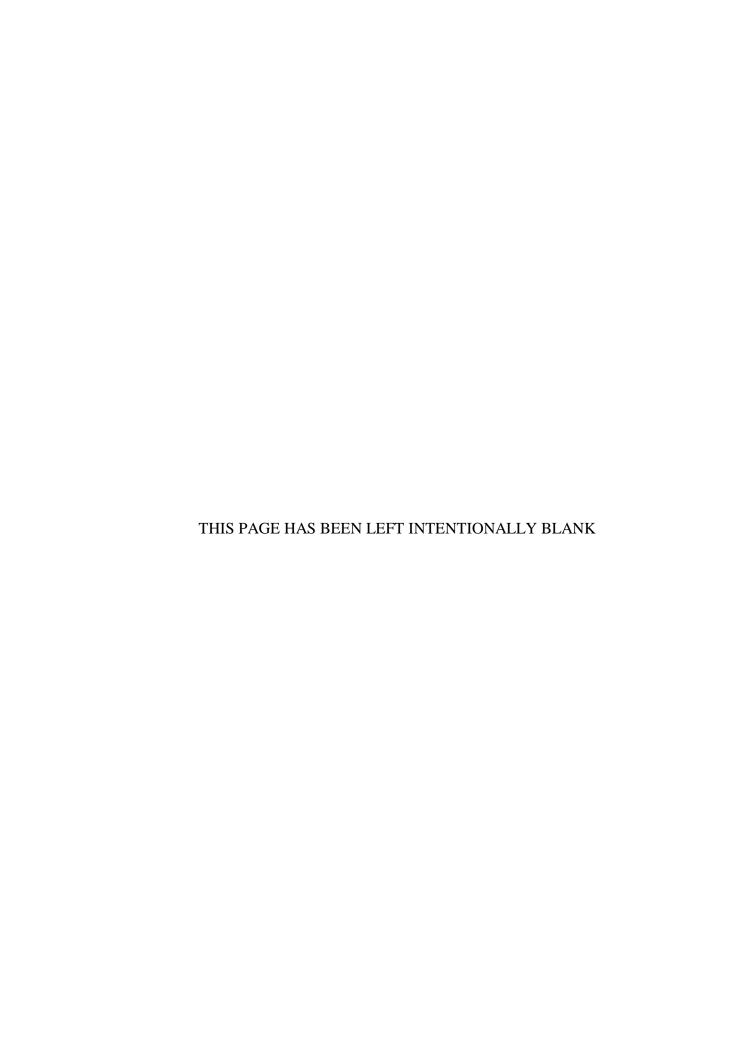
NOTE TO CONTRACTING OFFICER: Upon incorporation of a plan into the cherein the estimated dollar value of the contract:	contract, indicate
\$	

Section 00700 - Contract Clauses

	D (7 11 (D 4004) 11 1	
52.202-1 Alt I	Definitions (Dec 2001) Alternate I	MAY 2001
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	JUL 1995
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal	JAN 1997
	or Improper Activity	
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal	JUN 1997
	Transactions	
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting	JUL 1995
	With Contractors Debarred, Suspended, or Proposed for	
	Debarment	
52.211-13	Time Extensions	SEP 2000
52.211-18	Variation in Estimated Quantity	APR 1984
52.214-26	Audit and RecordsSealed Bidding	OCT 1997
52.214-27	Price Reduction for Defective Cost or Pricing Data -	OCT 1997
32.214-27	Modifications - Sealed Bidding	OC1 1997
50.014.00		OCT 1007
52.214-28	Subcontracting Cost Or Pricing DataModificationsSealed Bidding	OCT 1997
52 210 4	Notice of Price Evaluation Preference for HUBZone Small	JAN 1999
52.219-4	Business Concerns	JAN 1999
52.219-8	Utilization of Small Business Concerns	OCT 2000
52.219-8 52.219-9 Alt I		OCT 2000
	Small Business Subcontracting Plan (Jan 2002) Alternate I	
52.219-16 52.222-1	Liquidated Damages-Subcontracting Plan Notice To The Government Of Labor Disputes	JAN 1999 FEB 1997
52.222-3	Convict Labor	AUG 1996
52.222-4	Contract Work Hours and Safety Standards Act - Overtime	SEP 2000
32.222-4	Compensation	SEF 2000
52.222-6	Davis Bacon Act	FEB 1995
52.222-7	Withholding of Funds	FEB 1988
52.222-8	Payrolls and Basic Records	FEB 1988
52.222-9	· ·	FEB 1988
52.222-9 52.222-10	Apprentices and Trainees	FEB 1988
	Compliance with Copeland Act Requirements	FEB 1988
52.222-11 52.222-12	Subcontracts (Labor Standards) Contract Termination-Debarment	FEB 1988
52.222-12	Compliance with Davis-Bacon and Related Act Regulations.	
	1	FEB 1988
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	FEB 1988
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-27	Affirmative Action Compliance Requirements for	FEB 1999
50.000.05	Construction	DEC 2001
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans	DEC 2001
50 000 07	of the Vietnam Era and Other Eligible Veterans	H IN 1 1000
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans	SDEC 2001
52.222.6	Of The Vietnam Era and Other Eligible Veterans	3.6.437.0001
52.223-6	Drug Free Workplace	MAY 2001
52.223-14	Toxic Chemical Release Reporting	OCT 2000

52 225 0		151770000
52.225-9	Buy American ActConstruction Materials	MAY 2002
52.225-10	Notice of Buy American Act RequirementConstruction	MAY 2002
	Materials	
52.225-13	Restrictions on Certain Foreign Purchases	JUL 2000
52.226-1	Utilization Of Indian Organizations And Indian-Owned	JUN 2000
	Economic Enterprises	
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright	AUG 1996
	Infringement	
52.227-4	Patent Indemnity-Construction Contracts	APR 1984
52.228-1	Bid Guarantee	SEP 1996
52.228-2	Additional Bond Security	OCT 1997
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-11	Pledges Of Assets	FEB 1992
52.228-12	Prospective Subcontractor Requests for Bonds	OCT 1995
52.228-14	Irrevocable Letter of Credit	DEC 1999
52.228-15	Performance and Payment BondsConstruction	JUL 2000
52.229-3	Federal, State And Local Taxes	JAN 1991
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 1997
52.232-17	Interest	JUN 1996
52.232-23	Assignment Of Claims	JAN 1986
52.232-27	Prompt Payment for Construction Contracts	FEB 2002
52.232-33	Payment by Electronic Funds TransferCentral Contractor	MAY 1999
	Registration	
52.233-1	Disputes	JUL 2002
52.233-3	Protest After Award	AUG 1996
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment,	APR 1984
	Utilities, and Improvements	
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21	Specifications and Drawings for Construction	FEB 1997
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	AUG 1987
52.244-2	Subcontracts	AUG 1998
52.246-12	Inspection of Construction	AUG 1996
52.248-3	Value Engineering-Construction	FEB 2000
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-	SEP 1996
	Price) (Sep 1996) - Alternate I	
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.249-5000	Basis for Settlement of Proposals	APR 2000
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991

252.203-7001	Prohibition On Persons Convicted of Fraud or Other	MAR 1999
	Defense-Contract-Related Felonies	
252.203-7002	Display Of DOD Hotline Poster	DEC 1991
252.204-7000	Disclosure Of Information	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	Required Central Contractor Registration	NOV 2001
252.209-7000	Acquisition From Subcontractors Subject To On-Site	NOV 1995
	Inspection Under The Intermediate Range Nuclear Forces	
	(INF) Treaty	
252.209-7001	Disclosure of Ownership or Control by the Government of a	MAR 1998
	Terrorist Country	
252.209-7004	Subcontracting With Firms That Are Owned or Controlled	MAR 1998
	By The Government of a Terrorist Country	
252.219-7003	Small, Small Disadvantaged and Women-Owned Small	APR 1996
	Business Subcontracting Plan (DOD Contracts)	
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7031	Secondary Arab Boycott Of Israel	JUN 1992
252.227-7033	Rights in Shop Drawings	APR 1966
252.231-7000	Supplemental Cost Principles	DEC 1991
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7002	Obstruction of Navigable Waterways	DEC 1991
252.236-7004	Payment for Mobilization and Demobilization	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7023	Transportation of Supplies by Sea	MAY 2002
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000



Section 00700 - Contract Clauses

52.202-1 DEFINITIONS (DEC 2001) -- ALTERNATE I (MAY 2001)

- (a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.
- (b) "Commercial component" means any component that is a commercial item.
- (c) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and that--
- (i) Has been sold, leased, or licensed to the general public; or
- (ii) Has been offered for sale, lease, or license to the general public;
- (2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;
- (3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for-
- (i) Modifications of a type customarily available in the commercial marketplace; or
- (ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. "Minor" modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;
- (4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;
- (5) Installation services, maintenance services, repair services, training services, and other services if-
- (i) Such services are procured for support of an item referred to in paragraph (c)(1), (2), (3), or (4) of this definition, regardless of whether such services are provided by the same source or at the same time as the item; and
- (ii) The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government;
- (6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed. For purposes of these services--
- (i) Catalog price means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public; and

- (ii) Market prices means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors.
- (7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or
- (8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.
- (d) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).
- (e) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.
- (f) Nondevelopmental item means--
- (1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;
- (2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or
- (3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.

52.203-3 GRATUITIES (APR 1984)

- (a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--
- (1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and
- (2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.
- (b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.
- (c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled-
- (1) To pursue the same remedies as in a breach of the contract; and
- (2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

- (a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee
- (b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

- (a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.
- (b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.
- (c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed \$100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

- (b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -
- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.
- (c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.
- (2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.
- (3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.
- (4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the

Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--
- (1) Cancel the solicitation, if the contract has not yet been awarded or issued; or
- (2) Rescind the contract with respect to which--
- (i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27(a) or (b) of the Act for the purpose of either--
- (A) Exchanging the information covered by such subsections for anything of value; or
- (B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or
- (ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.
- (b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.
- (c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.
- (b) The price or fee reduction referred to in paragraph (a) of this clause shall be--
- (1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;
- (2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

- (3) For cost-plus-award-fee contracts--
- (i) The base fee established in the contract at the time of contract award;
- (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
- (4) For fixed-price-incentive contracts, the Government may--
- (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
- (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.
- (5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.
- (c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.
- (d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

- (b) Prohibitions.
- (1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting

to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

- (2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.
- (3) The prohibitions of the Act do not apply under the following conditions:
- (i) Agency and legislative liaison by own employees.
- (A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.
- (B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.
- (C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:
- (1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.
- (2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.
- (D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--
- (1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action:
- (2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and
- (3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.
- (E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.
- (ii) Professional and technical services.
- (A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--
- (1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or

negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

- (2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
- (B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.
- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
- (D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.
- (E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.
- (c) Disclosure.
- (1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.
- (2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--
- (i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
- (iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

- (3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.
- (4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.
- (d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.
- (e) Penalties.
- (1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
- (2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.
- (f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as--

- (1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or
- (2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not
- (3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.
- "Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.
- "Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:
- (1) Postconsumer fiber; and
- (2) Manufacturing wastes such as--

- (i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and
- (ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.
- (b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.
- (c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

- (a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.
- (b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarrent by the Federal Government.
- (c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:
- (1) The name of the subcontractor.
- (2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.
- (3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.
- (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-13 TIME EXTENSIONS (SEP 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

52.214-26 AUDIT AND RECORDS--SEALED BIDDING. (OCT 1997)

- (a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.
- (b) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with the pricing of any modification to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--
- (1) The proposal for the modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the modification; or
- (4) Performance of the modification.
- (c) Comptroller General. In the case of pricing any modification, the Comptroller General of the United States, or an authorized representative, shall have the same rights as specified in paragraph (b) of this clause.

- (d) Availability. The Contractor shall make available at its office at all reasonable times the materials described in reproduction, until 3 years after final payment under this contract, or for any other period specified in Subpart 4.7 of the Federal Acquisition Regulation (FAR). FAR Subpart 4.7, Contractor Records Retention, in effect on the data of this contract, is incorporated by reference in its entirety and made a part of this contract.
- (1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement.
- (2) Records pertaining to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to the performance of this contract shall be made available until disposition of such appeals, litigation, or claims
- (e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (e), in all subcontracts expected to exceed the threshold in FAR 15.403-4(a)(1) for submission of cost or pricing data.

52.214-27 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997)

- (a) This clause shall become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for the submission of cost or pricing data at FAR 15.403-4(a)(1), except that this clause does not apply to a modification if an exception under FAR 15.403-1(b) applies.
- (1) Based on adequate price competition;
- (2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (3) Set by law or regulation.
- (b) If any price, including profit, negotiated in connection with any modification under this clause, was increased by any significant amount because
- (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;
- (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or
- (3) any of these parties furnished data of any description that were not accurate, the price shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) above.
- (c) Any reduction in the contract price under paragraph (b) above due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which:
- (1) the actual subcontract; or

- (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.
- (d) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made:
- (1) the Contractor agrees not to raise the following matters as a defense:
- (i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted;
- (ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer;
- (iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract; or
- (iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.
- (2) Except as prohibited by subdivision (d)(2)(ii) of this clause:
- (i) an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if:
- (A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and
- (B) The Contractor proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.
- (ii) An offset shall not be allowed if:
- (A) The understated data was known by the Contractor to be understated when the Certificate of Current Cost or Pricing Data was signed; or (B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.
- (e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid:
- (1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and
- (2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data which were incomplete, inaccurate, or noncurrent.

52.214-28 SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997)

- (a) The requirements of paragraphs (b) and (c) of this clause shall:
- (1) become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at (FAR) 48 CFR 15.403-4(a)(1); and
- (2) be limited to such modifications.
- (b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modifications involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1(b) applies.
- (1) Based on adequate price competition;
- (2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (3) Set by law or regulation.
- (c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in subsection 15.406-2 of the Federal Acquisition Regulation that, to the best of its knowledge and belief, the data submitted under paragraph (b) above were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.
- (d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that, when entered into, exceeds the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1).

(End of clause)

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

- (a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.
- (b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--
- (i) Offers from HUBZone small business concerns that have not waived the evaluation preference;
- (ii) Otherwise successful offers from small business concerns;
- (iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and
- (iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

- (2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.
- (3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

- (c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.
- Offeror elects to waive the evaluation preference.
- (d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for
- (1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;
- (2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;
- (3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be will be spent on the concern's employees or the employees of other HUBZone small business concerns; or
- (4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.
- (e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.
- (f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

- (1) Means a small business concern--
- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that-

- (1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;
- (2) No material change in disadvantaged ownership and control has occurred since its certification;
- (3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
- (4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern-

- (1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002)--ALTERNATE I (OCT 2001).

- (a) This clause does not apply to small business concerns.
- (b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

- (c) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.
- (d) The offeror's subcontracting plan shall include the following:
- (1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.
- (2) A statement of--

- (i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan:
- (ii) Total dollars planned to be subcontracted to small business concerns;
- (iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;
- (iv) Total dollars planned to be subcontracted to HUBZone small business concerns;
- (v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and
- (vi) Total dollars planned to be subcontracted to women-owned small business concerns.
- (3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--
- (i) Small business concerns;
- (ii) Veteran-owned small business concerns;
- (iii) HUBZone small business concerns;
- (iv) Small disadvantaged business concerns; and
- (v) Women-owned small business concerns.
- (4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the offeror in included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—
- (i) Small business concerns:
- (ii) Veteran-owned small business concerns;
- (iii) HUBZone small business concerns;
- (iv) Small disadvantaged business concerns; and
- (v) Women-owned small business concerns.
- (7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

- (8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.
- (9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.
- (10) Assurances that the offeror will--
- (i) Cooperate in any studies or surveys as may be required;
- (ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;
- (iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.
- (iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.
- (11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)
- (i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.
- (ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.
- (iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating-
- (A) Whether small business concerns were solicited and, if not, why not;
- (B) Whether veteran-owned small business concerns were solicited and, if not, why not;
- (C) Whether HUBZone small business concerns were solicited and, if not, why not;
- (D) Whether small disadvantaged business concerns were solicited and, if not, why not;
- (E) Whether women-owned small business concerns were solicited and, if not, why not; and
- (F) If applicable, the reason award was not made to a small business concern.
- (iv) Records of any outreach efforts to contact--
- (A) Trade associations;

- (B) Business development organizations;
- (C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and
- (D) Veterans service organizations.
- (v) Records of internal guidance and encouragement provided to buyers through-
- (A) Workshops, seminars, training, etc.; and
- (B) Monitoring performance to evaluate compliance with the program's requirements.
- (vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.
- (e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:
- (1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.
- (2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all ``make-or-buy" decisions.
- (3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.
- (4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.
- (f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--
- (1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.
- (g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.
- (h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

- (i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.
- (j) The Contractor shall submit the following reports:
- (1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.
- (2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

- (a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.
- (b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.
- (c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.
- (d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.
- (e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

(End of clause)

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

- (a)(1) The worker is paid or is in an approved work training program on a voluntary basis;
- (2) Representatives of local union central bodies or similar labor union organizations have been consulted;
- (3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and
- (4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
- (b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

- (a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.
- (b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and

subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

- (c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.
- (d) Payrolls and basic records.
- (1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.
- (2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.
- (e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding \$100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:
- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination.
- (ii) The classification is utilized in the area by the construction industry.
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.
- (3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (c) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon

prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

- (a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--
- (i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;
- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

- (4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.
- (c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

- (a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits

for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

- (a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.
- (b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.
- (2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(End of clause)

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

- (a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

- (a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
- (b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-26 EQUAL OPPORTUNITY (APR 2002)

- (a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.
- (b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.
- (1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.
- (2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.
- (3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.
- (4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- (6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
- (7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.
- (8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.
- (9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the

Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

- (10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.
- (11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.
- (c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

- (1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- (2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
- (3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and
- (4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).
- (b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.
- (c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in

an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

- (d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.
- (e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.
- (f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- (g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:
- (1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.
- (2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- (3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.
- (4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- (5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.
- (6) Disseminate the Contractor's equal employment policy by--

- (i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations:
- (ii) Including the policy in any policy manual and in collective bargaining agreements;
- (iii) Publicizing the policy in the company newspaper, annual report, etc.;
- (iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and
- (v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.
- (7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.
- (9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- (10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.
- (11) Validate all tests and other selection requirements where required under 41 CFR 60-3.
- (12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.
- (13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.
- (14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.
- (15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- (16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.
- (h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a

contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

- (1) Actively participates in the group;
- (2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;
- (3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;
- (4) Makes a good-faith effort to meet its individual goals and timetables; and
- (5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- (i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.
- (j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- (k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.
- (l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.
- (m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.
- (n) The Contractor shall designate a responsible official to-
- (1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;
- (2) Submit reports as may be required by the Government; and
- (3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(End of clause)

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a)) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

- (1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or
- (2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.
- (b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans' status in all employment practices such as--
- (ii) Upgrading;(iii) Demotion or transfer;(iv) Recruitment;
- (v) Advertising;

(i) Employment;

- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and

- (viii) Selection for training, including apprenticeship.
- (2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.
- (c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.
- (2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.
- (3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.
- (4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.
- (d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.
- (e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.
- (2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.
- (3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.
- (f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.
- (g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The

Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

- (i) Recruitment, advertising, and job application procedures;
- (ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;
- (iii) Rates of pay or any other form of compensation and changes in compensation;
- (iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- (v) Leaves of absence, sick leave, or any other leave;
- (vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;
- (vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
- (viii) Activities sponsored by the Contractor, including social or recreational programs; and
- (ix) Any other term, condition, or privilege of employment.
- (2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.
- (b) Postings. (1) The Contractor agrees to post employment notices stating--
- (i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and
- (ii) The rights of applicants and employees.
- (2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.
- (3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.
- (c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.
- (d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999)

- (a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--
- (1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and
- (2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.
- (b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."
- (c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.
- (d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).
- (e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.
- (f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to deter- mine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution,

dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

- (b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--
- (1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
- (2) Establish an ongoing drug-free awareness program to inform such employees about-
- (i) The dangers of drug abuse in the workplace;
- (ii) The Contractor's policy of maintaining a drug-free workplace;
- (iii) Any available drug counseling, rehabilitation, and employee assistance programs; and
- (iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;
- (4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--
- (i) Abide by the terms of the statement; and
- (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.
- (5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
- (6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
- (i) Taking appropriate personnel action against such employee, up to and including termination; or
- (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1)

though (b)(6) of this clause.

- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

- (a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.
- (b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--
- (1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
- (2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
- (3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- (4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or
- (5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.
- (c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--
- (1) The Contractor shall notify the Contracting Officer; and
- (2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.
- (d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

- (e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall-
- (1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and
- (2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-9 BUY AMERICAN ACT—CONSTRUCTION MATERIALS (MAY 2002)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

- (2) This requirement does not apply to the construction material or components listed by the Government as follows: none
- (3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--
- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison Construction material description Unit of measure Quantity Price (dollars) \1\ Item 1 Foreign construction material... Domestic construction material... Item 2

Domestic construction material.....

Foreign construction material...

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-10 NOTICE OF BUY AMERICAN ACT REQUIREMENT--CONSTRUCTION MATERIALS (MAY 2002)

- (a) Definitions. Construction material, domestic construction material, and foreign construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act--Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).
- (b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.
- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.
- (d) Alternate offers.

- (1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--
- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of provision)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000)

- (a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).
- (b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.
- (c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any ``Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitute not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

- (b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.
- (1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW., MS 2626-MIB, Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

- (2) The Contractor may request an adjustment under the Indian Incentive Program to the following:
- (i) The estimated cost of a cost-type contract.
- (ii) The target cost of a cost-plus-incentive-fee prime contract.
- (iii) The target cost and ceiling price of a fixed-price incentive prime contract.
- (iv) The price of a firm-fixed-price prime contract.
- (3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.
- (4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.
- (c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or

- (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.
- (b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.
- (d) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

- (b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.
- (c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000.00, whichever is less.
- (d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.-
- (e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

- (a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.
- (b) Any surety fails to furnish reports on its financial condition as required by the Government;
- (c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or
- (d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

(End of clause)

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

- (a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.
- (b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.
- (c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the

insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

- (a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--
- (1) Pledge of assets; and
- (2) Standard Form 28, Affidavit of Individual Surety.
- (b) Pledges of assets from each person acting as an individual surety shall be in the form of-
- (1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;
- (2) A recorded lien on real estate. The offeror will be required to provide--
- (i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);
- (ii) Evidence of the amount due under any encumbrance shown in the evidence of title;
- (iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

- (b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.
- (c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--
- (1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;
- (2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:
- (i) For contracts subject to the Miller Act, the later of--
- (A) One year following the expected date of final payment;
- (B) For performance bonds only, until completion of any warranty period; or
- (C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.
- (ii) For contracts not subject to the Miller Act, the later of--
- (A) 90 days following final payment; or
- (B) For performance bonds only, until completion of any warranty period.
- (d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:			
Issuing Financial Institution's Letterhead or Name and Address]			
ssue Date			
RREVOCABLE LETTER OF CREDIT NO			
Account party's name			
Account party's address			

For Solicitation No(for reference only)
TO: [U.S. Government agency]
[U.S. Government agency's address]
1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on, or any automatically extended expiration date.
2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.
3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.
4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.
5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of [state of confirming financial institution, if any, otherwise state of issuing financial institution].
6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.
Sincerely,
[Issuing financial institution]
(f) The following format shall be used by the financial institution to confirm an ILC:
[Confirming Financial Institution's Letterhead or Name and Address]
(Date)
Our Letter of Credit Advice Number
Beneficiary: [U.S. Government agency]

Issuing Financial Institution:		
Issuing Financial Institution's LC	No.:	
Gentlemen:		
[name of issuing financial institut	tion] for drawings of up to United	inal of which is attached, issued by and ion date], or any automatically extended
2. Draft(s) drawn under the Letter	r of Credit and this Confirmation a	are payable at our office located at
3. We hereby undertake to honor Confirmation at our offices as spe		esented with the Letter of Credit and this
condition of this confirmation that		uent paragraphs are renumbered.] It is a nded without amendment for one year from the te, unless:
	y registered mail or other receipte	by the Contracting Officer, or the transferee and d means of delivery, that we elect not to consider
	on shall have exercised its right to to extend the expiration date of the	notify you or the transferee, the account party, e Letter of Credit.
	of Commerce Publication No. 500	e (UCP) for Documentary Credits, 1993 , and to the extent not inconsistent therewith, to
		this financial institution as described in Article is drawn against within 30 days after the
Sincerely,		
[Confirming financial institution]	-	
(g) The following format shall be	used by the Contracting Officer f	or a sight draft to draw on the Letter of Credit:
SIGHT DRAFT		
[City, State]		
(Date)		
[Name and address of financial in	astitution]	
Pay to the order of	[Beneficiary Agency]	the sum of United States \$

Inis draft is drawn under irrevocable Letter of Credit No.		
	_	
[Beneficiary Agency]		
Ву:	-	
(End of clause)		

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

- (b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:
- (1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.
- (2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.
- (3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.
- (ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.
- (c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.
- (d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.
- (e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

- (a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.
- "All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.
- "After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.
- "After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.
- (b) The contract price includes all applicable Federal, State, and local taxes and duties.
- (c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.
- (d) The contract price shall be decreased by the amount of any after-relieved Federal tax.
- (e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.
- (f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.
- (g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.
- (h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)

- (a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.
- (b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.
- (1) The Contractor's request for progress payments shall include the following substantiation:

- (i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.
- (ii) A listing of the amount included for work performed by each subcontractor under the contract.
- (iii) A listing of the total amount of each subcontract under the contract.
- (iv) A listing of the amounts previously paid to each such subcontractor under the contract.
- (v) Additional supporting data in a form and detail required by the Contracting Officer.
- (2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--
- (i) Consideration is specifically authorized by this contract; and
- (ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.
- (c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract:
- (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification	on is not to be construed as final acceptance of a subcontractor's performance.
(Name)	
(Title)	

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

- (1) Notify the Contracting Officer of such performance deficiency; and
- (2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--
- (i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or
- (ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.
- (e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.
- (f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--
- (1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or
- (2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.
- (g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.
- (h) Final payment. The Government shall pay the amount due the Contractor under this contract after-
- (1) Completion and acceptance of all work;
- (2) Presentation of a properly executed voucher; and
- (3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).
- (i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

- (j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--
- (1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and
- (2) Deducted from the next available payment to the Contractor.

52.232-17 INTEREST (JUNE 1996)

- (a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:
- (1) The date fixed under this contract.
- (2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.
- (3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.
- (4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.
- (c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

- (a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.
- (b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.
- (c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes

such action in writing.

(End of clause)

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

- (a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:
- (i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.
- (A) The due date for making such payments is 30 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 30th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.
- (ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).
- (A) The due date for making such payments is the later of the following two events:
- (1) The 30th day after the designated billing office receives a proper invoice from the Contractor.
- (2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.
- (B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7

days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

- (i) Name and address of the Contractor.
- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)
- (iii) Contract number or other authorization for work or services performed (including order number and contract line item number).
- (iv) Description of work or services performed.
- (v) Delivery and payment terms (e.g., discount for prompt payment terms).
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (x) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (xi) Any other information or documentation required by the contract.
- (3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

- (iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
- (4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
- (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
- (6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
- (A) The Government owes an interest penalty of \$1 or more;
- (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
- (C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.
- (ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
- (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

- (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.
- (b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
- (c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:
- (1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.
- (2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--
- (i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and
- (ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:
- (i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and
- (ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.
- (d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--
- (1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;
- (2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and
- (3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--
- (i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and
- (ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

- (e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--
- (1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;
- (2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;
- (3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;
- (4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--
- (i) Make such payment within--
- (A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or
- (B) Seven days after the Contractor recovers such funds from the Government; or
- (ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;
- (5) Notice to Contracting Officer. Notify the Contracting Officer upon-
- (i) Reduction of the amount of any subsequent certified application for payment; or
- (ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--
- (A) The amounts withheld under paragraph (e)(1) of this clause; and
- (B) The dates that such withholding began and ended; and
- (6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--
- (i) The day the identified subcontractor performance deficiency is corrected; or
- (ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.
- (f) Third-party deficiency reports--(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments

otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause-

- (i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and
- (ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.
- (2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--
- (i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or
- (ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts DisputesAct of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--
- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.
- (h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.
- (i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.
- (j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.
- (k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.
- (l) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

- (a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.
- (2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either-
- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).
- (b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.
- (c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210
- (d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.
- (e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.
- (f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for-
- (i) Making a correct payment;
- (ii) Paying any prompt payment penalty due; and
- (iii) Recovering any erroneously directed funds.
- (2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--
- (i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

- (g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.
- (h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.
- (i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.
- (j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

52.233-1 DISPUTES. (JUL 2002)

- (a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).
- (b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.
- (c) Claim, as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.
- (2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -
- (A) Exceeding \$100,000; or
- (B) Regardless of the amount claimed, when using -

- (1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or
- (2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).
- (ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.
- (iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.
- (3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.
- (e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.
- (f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.
- (g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative disput resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.
- (h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.
- (i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

- (a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--
- (1) Cancel the stop-work order; or

- (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.
- (b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--
- (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
- (2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.
- (e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.
- (f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

- (a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of
- (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or
- (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.
- (b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an

equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

- (c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.
- (d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of clause)

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

- (a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to
- (1) conditions bearing upon transportation, disposal, handling, and storage of materials;
- (2) the availability of labor, water, electric power, and roads;
- (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;
- (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.
- (b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

- (a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.
- (b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the

performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

(End of clause)

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those

limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

- (b) The Contractor shall protect from damage all existing improvements and utilities
- (1) at or near the work site, and
- (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

- (a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.
- (b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

- (a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.
- (b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(End of clause)

52.236-13 ACCIDENT PREVENTION (NOV 1991)

- (a) The Contractor shall provide and maintain work environments and procedures which will
- (1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;
- (2) avoid interruptions of Government operations and delays in project completion dates; and
- (3) control costs in the performance of this contract.
- (b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-
- (1) Provide appropriate safety barricades, signs, and signal lights;
- (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.
- (c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.
- (d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.
- (e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(End of clause)

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

- (a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.
- (b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

- (a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.
- (b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order",

"designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

- (c) Where "as shown," as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".
- (d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.
- (f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(End of clause)

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

(End of clause)

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing.

This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

- (a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.
- (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-4 CHANGES (AUG 1987)

- (a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--
- (1) In the specifications (including drawings and designs):
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.
- (b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating
- (1) the date, circumstances, and source of the order and
- (2) that the Contractor regards the order as a change order.

- (c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.
- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after
- (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.
- (f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

52.244-2 SUBCONTRACTS (AUG 1998)

(a) Definitions. As used in this clause--

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

- (b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.
- (c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.
- (d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--
- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds--

- (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
- (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:
- (f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:
- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
- (vii) A negotiation memorandum reflecting--
- (A) The principal elements of the subcontract price negotiations;
- (B) The most significant considerations controlling establishment of initial or revised prices;
- (C) The reason cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
- (E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
- (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.
- (g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any

subcontract nor approval of the Contractor's purchasing system shall constitute a determination-

- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.
- (h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.
- (k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

 (End of clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

- (a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.
- (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
- (c) Government inspections and tests are for the sole benefit of the Government and do not-
- (1) Relieve the Contractor of responsibility for providing adequate quality control measures;
- (2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;
- (3) Constitute or imply acceptance; or
- (4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.
- (d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

- (e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.
- (f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.
- (h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000)

- (a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.
- (b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.
- "Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.
- "Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.
- "Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--
- (i) In deliverable end item quantities only; or
- (ii) To the contract type only.
- (c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:
- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for
- (i) the affected portions of the existing contract requirement and
- (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.
- (4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.
- (5) A prediction of any effects the proposed change would have on collateral costs to the agency.
- (6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.
- (7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.
- (d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.
- (e) Government action.
- (1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

- (f) Sharing.
- (1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by
- (i) 45 percent for fixed-price contracts or
- (ii) 75 percent for cost-reimbursement contracts.
- (2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--
- (i) Accept the VECP;
- (ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and
- (iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.
- (g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.
- (h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.
- (i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering-- Construction clause of contract , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations." If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and

submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996) - ALTERNATE I (SEP 1996)

- (a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
- (1) Stop work as specified in the notice.
- (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- (3) Terminate all subcontracts to the extent they relate to the work terminated.
- (4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
- (5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.
- (6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.
- (7) Complete performance of the work not terminated.
- (8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.
- (9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

- (c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.
- (d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.
- (e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
- (f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.
- (g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:
- (1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--
- (i) The cost of this work;
- (ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and
- (iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.
- (2) The reasonable costs of settlement of the work terminated, including--
- (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
- (ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

- (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
- (h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.
- (i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.
- (j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.
- (k) In arriving at the amount due the Contractor under this clause, there shall be deducted-
- (1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;
- (2) Any claim which the Government has against the Contractor under this contract; and
- (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.
- (l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.
- (m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.
- (2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.
- (n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

- (a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.
- (b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause. if--
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include
- (i) acts of God or of the public enemy,
- (ii) acts of the Government in either its sovereign or contractual capacity,
- (iii) acts of another Contractor in the performance of a contract with the Government,
- (iv) fires,
- (v) floods,
- (vi) epidemics,
- (vii) quarantine restrictions,
- (viii) strikes,
- (ix) freight embargoes,
- (x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
- (2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

- (f) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
- (g) If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.
- (3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
- (4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).
- (5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

 (End of Clause)

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

- (a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.
- (b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.
- (h) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

- (a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- (b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

- (a) Definitions. As used in this clause—
- (1) "Arising out of a contract with the DoD" means any act in connection with—
- (i) Attempting to obtain;
- (ii) Obtaining, or
- (iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).
- (2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.
- (3) "Date of conviction" means the date judgment was entered against the individual.
- (b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--
- (1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;
- (2) On the board of directors of any DoD contractor or first-tier subcontractor;
- (3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or
- (4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.
- (c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.
- (d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—
- (1) Employing a person under a prohibition specified in paragraph (b) of this clause; or
- (2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.
- (e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—
- (1) Suspension or debarment;
- (2) Cancellation of the contract at no cost to the Government; or
- (3) Termination of the contract for default.
- (f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—
- (1) The person involved;
- (2) The nature of the conviction and resultant sentence or punishment imposed;

- (3) The reasons for the requested waiver; and
- (4) An explanation of why a waiver is in the interest of national security.
- (g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.
- (h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

- (a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.
- (b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.
- (i) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

- (a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--
- (1) The Contracting Officer has given prior written approval; or
- (2) The information is otherwise in the public domain before the date of release.
- (b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.
- (c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION (NOV 2001)

(a) Definitions.

As used in this clause--

- (1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.
- (2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.
- (3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.
- (4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.
- (b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.
- (2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
- (3) Lack of registration in the CCR database will make an offeror ineligible for award.
- (4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.
- (d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at http://www.ccr.gov.

(End of clause)

252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)

- (a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.
- (b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

(End of clause)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.
- (3) "Significant interest" means --
- (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
- (ii) Holding a management position in the firm, such as a director or officer;
- (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
- (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
- (v) Holding 50 percent or more of the indebtness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the

Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

- (1) Identification of each government holding a significant interest; and
- (2) A description of the significant interest held by each government.

(End of provision)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

- (a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.
- (b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

(End of clause)

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities*, as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

- (b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business*, when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.
- (c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:
- (1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and
- (2) It meets the requirements of 10 U.S.C. 2323a.

- (d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.
- (e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--
- (f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.
- (g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

- (a) Definitions.
- (1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.
- (2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.
- (b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.
- (c) Contractor programs shall include the following, or appropriate alternatives:
- (1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;
- (2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;
- (3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;
- (4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:
- (i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

- (ii) In addition, the Contractor may establish a program for employee drug testing--
- (A) When there is a reasonable suspicion that an employee uses illegal drugs; or
- (B) When an employees has been involved in an accident or unsafe practice;
- (C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;
- (D) As part of a voluntary employee drug testing program.
- (iii) The Contractor may establish a program to test applicants for employment for illegal drug use.
- (iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2..1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.
- (d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.
- (e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

- (a) Definitions. As used in this clause--
- (1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).
- (2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.
- (b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it-
- (1) Does not comply with the Secondary Arab Boycott of Israel; and
- (2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

- (a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

(End of clause)

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

- (a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.
- (b) The price breakdown --
- (1) Must include sufficient detail to permit an analysis of profit, and of all costs for --
- (i) Material;
- (ii) Labor;
- (iii) Equipment;
- (iv) Subcontracts; and
- (v) Overhead; and
- (2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.
- (c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.
- (d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7002 OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991)

- (a) The Contractor shall --
- (1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;
- (2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and

- (3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.
- (b) The Contracting Officer may --
- (1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and
- (2) Deduct the cost of removal from any monies due or to become due to the Contractor; or
- (3) Recover the cost of removal under the Contractor's bond.
- (c) The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et. seq.).

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DEC 1991)

- (a) The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.
- (1) 60 percent of the lump sum price upon completion of the contractor's mobilization at the work site.
- (2) The remaining 40 percent upon completion of demobilization.
- (b) The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs (a) (1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.
- (1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --
- (i) Actual mobilization costs at completion of mobilization;
- (ii) Actual demobilization costs at completion of demobilization; and
- (iii) The remainder of this item in the final payment under this contract.
- (2) The Contracting Officer's determination of the actual costs in paragraph (b)(1) of this clause is not subject to appeal.

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for

performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)	 	
(Title)	 	

- (c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including-
- (1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and
- (2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.
- (d) The certification requirement in paragraph (b) of this clause does not apply to----
- (1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or
- (2) Final adjustment under an incentive provision of the contract.

252,247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAY 2002)

- (a) Definitions. As used in this clause --
- (1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.
- (2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.
- (3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.
- (4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.
- (5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.
- (6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.
- (i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a

reference to a DoD contract number or a military destination.

- (ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.
- (7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.
- (b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.
- (2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--
- (i) This contract is a construction contract; or
- (ii) The supplies being transported are--
- (A) Noncommercial items; or
- (B) Commercial items that--
- (1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);
- (2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
- (3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.
- (c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --
- (1) U.S.-flag vessels are not available for timely shipment;
- (2) The freight charges are inordinately excessive or unreasonable; or
- (3) Freight charges are higher than charges to private persons for transportation of like goods.
- (d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --
- (1) Type, weight, and cube of cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;

Contractor as an improper is	nvoice for the purposes of the Pro	tation, the Government will reject and return it to the ompt Payment clause of this contract. In the event the formance of this contract, the Contracting Officer is
TOTAL		
ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
		oments were made on non-U.Sflag vessels without the hall describe these shipments in the following format
(3) Ocean transportation wa U.Sflag ocean transportati		e written consent of the Contracting Officer for all no
(2) Ocean transportation wa	s used and only U.Sflag vessels	were used for all ocean shipments under the contract
(1) No ocean transportation	was used in the performance of t	his contract;
(f) The Contractor shall pro knowledge and belief	vide with its final invoice under t	his contract a representation that to the best of its
(10) Name of the steamship	company.	
(9) Total ocean freight in U	S. dollars; and	
(8) Gross weight in pounds	and cubic feet if available;	
(7) Description of commodi	ty;	
(6) Port of final discharge;		
(5) Port of loading;		
(4) Date of loading;		
(3) Vessel flag of registry;		
(2) Name of vessel;		
(1) Prime contract number;		
and the Maritime Administr	ation, Office of Cargo Preference C 20590, one copy of the rated or	covered by this clause, provide the Contracting Office, U.S. Department of Transportation, 400 Seventh board vessel operating carrier's ocean bill of lading,
and telephone numbers) wit		ontacted. Copies of telephone notes, telegraphic and e.

(6) Prime contract number; and

entitled to equitably adjust the contract, based on the unauthorized use.

- (h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:
- (1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.
- (2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

- (a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --
- (1) Shall notify the Contracting Officer of that fact; and
- (2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.
- (b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--
- (1) In all subcontracts under this contract, if this contract is a construction contract; or
- (2) If this contract is not a construction contract, in all subcontracts under this contract that are for-
- (i) Noncommercial items; or
- (ii) Commercial items that--
- (A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);
- (B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
- (C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)



TABLE OF CONTENTS

SPECIAL CONTRACT REQUIREMENTS

00800	SPECIAL CLAUSES
00805	CONTRACT ADMINISTRATION
00815	WAGE RATES
00835	REGIONS FOR THE CONSTRUCTION EQUIPMENT OWNERSHIP AND OPERATIONS EXPENSE SCHEDULE
00845	ABSTRACT OF BOTTOM SAMPLES
00850	COMPARISON OF PHILADELPHIA TO TRENTON PROJECT DATUM AND MEAN LOW WATER DATUM
00855	SURVEY CONTROL DESCRIPTION SHEETS
00860	CENTERLINE COORDINATES AND FLAIR DATA

SECTION 00800

SPECIAL CLAUSES

INDEX

PARA	TITLE
SC-1	COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK
SC-2	LIQUIDATED DAMAGES - CONSTRUCTION
SC-3	CONTINUING CONTRACTS
SC-4	CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS
SC-5	PHYSICAL CONDITIONS
SC-6	LAYOUT OF WORK
SC-7	PERFORMANCE OF WORK BY THE CONTRACTOR
SC-8	ENVIRONMENTAL LITIGATION
SC-9	SIGNAL LIGHTS
SC-10	CONTINUITY OF WORK
SC-11	FINAL EXAMINATION AND ACCEPTANCE
SC-12	SHOALING
SC-13	INSPECTION
SC-14	ACCOMODATIONS AND MEALS FOR GOVERNMENT INSPECTORS
SC-15	EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
SC-16	PERFORMANCE EVALUATION OF CONTRACTOR
SC-17	TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER
SC-18	INSURANCE REQUIREMENTS

SPECIAL CLAUSES

SC-1 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK

The Contractor shall be required to (a) commence disposal area work under this contract within 15 calendar days after the date the Contractor receives the notice to proceed, (b) complete the disposal area construction of Money Island and Biles Island sites ready for use not later than 1 October 2003, (c) to prosecute all other work diligently, (d) and to complete the entire work in 180 calendar days. The time stated for completion shall include final cleanup of the premises.

SC-2 LIQUIDATED DAMAGES - CONSTRUCTION (SEP 2000)

- (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$550.00 for each calendar day of delay until the work is completed or accepted.
- (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause. (FAR 52.211-12)

SC-3 CONTINUING CONTRACTS

- a. This is a continuing contract, as authorized by Section 10 of the River and Harbor Act of September 22, 1922 (33 U.S. Code 621). The payment of some portion of the contract price is dependent upon reservations of funds from future appropriations, and from future contribution to the project having one or more non-federal project sponsors. The responsibilities of the Government are limited by this clause notwithstanding any contrary provision of the "Payments to Contractor" clause or any other clause of this contract.
- b. The sum of \$500,000 has been reserved for this contract and is available for payments to the Contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds together with funds provided by one or more non-federal project sponsors will be reserved for this contract.
- c. Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not entitle the Contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs f and i below. No such failure shall constitute a breach of this contract, except that this provision shall not bar a breach-of-contract action if an amount finally determined to be due as a termination allowance remains unpaid for one year due solely to a failure to reserve sufficient additional funds therefore.
- d. The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The Contracting Officer will promptly notify the Contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

- e. If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the Contractor shall give written notice to the Contracting Officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under the contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.
- f. No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. The Contractor shall be entitled to simple interest on any payment that the Contracting Officer determines was actually earned under the terms of the contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, as in effect on the first day of the delay in such payment.
- g. Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the Contractor to any price adjustment under the "Suspension of Work" clause or in any other manner under this contract.
- h. An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.
- i. If, upon the expiration of sixty (60) days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the Contractor, by written notice delivered to the Contracting Officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be considered a termination for the convenience of the Government.
- j. If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the Contractor because of work performed and to be performed under the contract during the fiscal year, the Government reserves the right, after notice to the Contractor, to reduce said reservation by the amount of such excess. (EFAR 52.232-5001)

SC-4 CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS

- a. Upon obtaining the plans and specifications, the Contractor shall:
 - (1) Immediately check the specifications and all drawings;
 - (2) Compare the specifications and all drawings and verify the figures before laying out the work;
 - (3) Promptly notify the Contracting Officer of any discrepancies; and
 - (4) Be responsible for any errors which might have been avoided by complying with this paragraph.
- b. Large scale drawings shall, in general, govern small scale drawings. Figures marked on drawings shall, in general, be followed in preference to scale measurements.

- c. Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the contractor from performing such omitted or misdescribed details of the work, but shall be performed as if fully and correctly set forth and described in the drawings and specifications.
- e. The work shall conform to the specifications and the contract drawings identified on the following, all of which are available in the office of the District Engineer, U.S. Army Engineer District, Philadelphia, Room 643, Wanamaker Building, 100 Penn Square East, Philadelphia, PA 19107. Drawings are titled: Maintenance Dredging, Delaware River, Philadelphia, Pennsylvania to Trenton, New Jersey.

			Late	est	
Drawing No.	Subtitle	Date	е	Rev.	Date
61980	General Plan, Vicinity Map and List of Drawings	27	June	03	None
61981	Soundings - A.S. #1	27	June	03	None
61982	Soundings - A.S. #1, A.S #2 and A.S. #3	27	June	03	None
61983	Soundings - A.S. #3, A.S. #4 and A.S. #5	27	June	03	None
61984	Soundings - A.S. #5 and A.S. #6	27	June	03	None
61985	Soundings - A.S. #7, A.S. #8 and A.S. #9	27	June	03	None
61986	Soundings - A.S. #10, A.S. #11 and A.S. #12	27	June	03	None
61987	Soundings - A.S. #12, A.S. #13, A.S. #14 and A.S. #15	27	June	03	None
61988	Soundings- A.S. #15, A.S. #16, A.S. #17 A.S. #18, A.S. #19 and A.S. #20	27	June	03	None
61989	Soundings - Non-Dredging Reach	27	June	03	None
61990	Soundings - A.S. #21	27	June	03	None
61991	Soundings - Fairless Turning Basin	27	June	03	None
61992	Fairless Turning Basin				
	Coordinates	27	June	03	None
61993	Channel Cross Sections	27	June	03	None
61994	Channel Cross Sections	27	June	03	None
61995	Fairless Turning Basin Cross Sections	27	June	03	None
61996	Palmyra (No.4)Disposal Area Development	27	June	03	None
61997	Hawk Island (No.12)Disposal Area Development	27	June	03	None
61998	Burlington Island (22B) Disposal Area Development	27	June	03	None
61999	Money Island (No.26) Disposal Area Development	27	June	03	None
62000	Biles Island (No.28) Disposal Area Development	27	June	03	None
62001	Steel Sluice Box Details	27	June	03	None

SC-5 PHYSICAL CONDITIONS (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor. (FAR 52.236-4)

a. The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys. Samples of materials to be dredged were obtained using a harpoon and bottom samplers.

- b. Tide Data. The mean ranges of tides in the Delaware River are approximately 6.4 feet at Burlington, NJ and 6.0 feet at Pier 11 North in Philadelphia. A comparison of mean low water datum to the Corps of Engineers Philadelphia to Trenton Project Datum is presented in Section 00850 of this contract. The maximum velocity of the tidal current is about 2 mph.
- c. Weather Conditions. The site of the work is sheltered from storms. It is believed that work can be performed during all seasons of the year except during winter months when ice conditions may interfere with dredging operations. Complete weather records and reports may be obtained from the local U.S. Weather Bureau Office nearest to the work site. The Contractor shall satisfy himself as to the hazards likely to arise from weather conditions during the construction period.
- d. Channel Traffic. Traffic in the work area consists of ocean-going and coastwise vessels, tugs and barges, and pleasure craft. The traffic and vessels may interfere with dredging operations.
- e. Conditions of Channel. The channel conditions shown on the contract drawings represent the results of surveys made on the dates indicated and can only be considered as indicating the general conditions at that time.
- f. Obstruction of Channel. The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of such regulations if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917. The Contractor will be required to conduct the work in such manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such as extent as may be necessary to afford a practicable passage. The Contractor shall request the U.S. Coast Guard to issue a Notice to Mariners for each work assignment advising navigation interests that the Contractor's dredging plant will operating in the Harbor. The Contractor shall submit each such request to the U.S. Coast Guard, MSO/Group Philadelphia, 1 Washington Avenue, Philadelphia, PA 19147-4395. The Contractor shall furnish a copy of each request to the Contracting Officer not less than five days prior to the start of dredging. Each request shall contain the approximate time required for completion of dredging. Upon completion of dredging, the Contractor shall promptly remove his plant, including ranges, buoys, piles and other marks placed by him under the contract in navigable waters and on shore.
- g. Navigation Aids. The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard. If it becomes necessary to have any aid to navigation moved in order to complete dredging operations under this contract, the Contractor shall notify the U.S. Coast Guard at least 15 days prior to the desired date for movement of the aid. All requests shall be made in writing to: Commander (OAN), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704. A copy of each request shall be furnished to the Contracting Officer.
- h. Location. The location of the work is in the Delaware River between Philadelphia and the upper end of Biles Island.
- i. Bridge and Utility Crossings:

(1) Bridges: The following bridges cross the project waterway. The vertical clearances stated are above mean high water.

Bridge		zontal Clearance		
Penn Central RR Co.Ver Philadelphia, PA to Delair, NJ	rt. Lift	500 ft (down 135 ft (up)) 49 ft.	104.6
Betsy Ross Bridge Philadelphia, PA to Pennsauken, NJ	Fixed Hwy.	620 ft.	135 ft.	104.8
Tacony-Palmyra Bridge Philadelphia, PA to Palmyra, NJ	Bascule Hwy.	240 ft.	53 ft.	107.2
Burlington-Bristol Bridge Burlington, NJ to Bristol, PA	Vert. Lift	500 ft.(down 135 ft.(up)) 62 ft.	117.8
PA - NJ Turnpike Bridge	Fixed Hwy.	620 ft.	135 ft	. 121.2

(2) Utility Lines: The locations and elevations of all known utility lines crossing the river are presented in the following table:

Location	Description	Elevation
Upstream side of Penn Central Railroad Bridge	11 submarine cables (1 communication, 2 signal, 4 bridge operating, and 4 emergency)	48 ft below MLW across draw opening
300 ft upstream from Penn Central Railroad Bridge	(2) 12-inch submarine gas pipelines	65 ft below MLW
Tacony-Palmyra Bridge	(2) control cables(2) power cables and(1) telephone cable(all submarine)	natural bottom
0.5 miles downstream from Burlington- Bristol Bridge	aerial electric power lines	140 ft above MLW
Burlington Island to Bristol, PA	telephone cables	unknown

The Contractor shall take all necessary precautions to prevent damage to these utilities. The Contractor shall cause timely notice of the dredging to be given to the owners and, when in the opinion of the Contractor such action is necessary, he shall request the Government require said owner or

owners to mark the pipelines or move the cables so as to avoid interference with the dredging operations. Any request made by the Contractor shall be within 30 days following his receipt of the Notice to Proceed.

Disclaimer: The above information may not be complete and it is the Contractor's responsibility to investigate all utility crossings.

j. Current Meter:

The Contractor shall be aware of the NOAA current meter at Newbold (vicinity of Novolog facility). The meter is located on the south side of Newbold range approximately 200 ft. east of buoy "R78". Coordinates are 40 deg 08.0660' N, 074 deg 45.0059'W. The data cable to shore (1/2" diameter steel) runs along the bottom, NNW directly to the white NOAA tide house on the corner of the Novolog (Fairless) pier (40 deg. 08.234'N, 074 deg. 45.118'W).

k. Surveys:

Acceptance Sections Nos.1 and 2 are located in areas which experience the formation of sand waves along the riverbed. As these patterns tend to migrate over a period of time, it will be necessary to perform longitudinal survey lines as well as cross lines for before and after dredging soundings in these areas.

- 1. Laying of Submerged Pipelines and Obstruction of Channel. All discharge pipelines crossing a navigation channel shall be submerged. Should it become necessary in the performance of this contract to use a submerged pipeline, the Contractor shall notify the Contracting Officer in advance of the schedule for placement of the pipeline. If the submerged line is to be placed across a navigable channel, the Contractor shall submit a request for approval at least ten (10) working days (Sundays and holidays excluded) prior to the desired closure date, to the U.S. Coast Guard, MSO/Group Philadelphia, 1 Washington Avenue, Philadelphia, PA 19147-4395. A copy of each request shall be furnished to the Contracting Officer. This request shall contain the following information:
 - (1) Location (Channel Centerline Stationing) and depth (over the top of the pipeline) at which the submerged line will be placed;
 - (2) The desired length of time the channel is to be closed;
 - (3) The date and hour placement or removal will commence;
 - (4) The date and hour of anticipated completion; and
 - (5) The name and telephone number of the person to be contacted for information and response to any emergency condition.

The Coast Guard has indicated that the requirements of navigation may make it necessary to establish times other then those requested. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS PLANS WITH THE COAST GUARD SUFFICIENTLY IN ADVANCE OF THE PLANNED CLOSING TO PREVENT DELAY TO THE DREDGING OPERATIONS AND COMPLY WITH THE COAST GUARD REQUIREMENTS. The minimum depth to the top of any submerged pipe within the dredging areas in the Delaware River shall be not less than that shown as the required dredging depth for the appropriate acceptance sections shown on the contract drawings.

- m. Bridge to Bridge Radio Telephone Equipment. In order that radio telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio telephone equipment. The radio telephone equipment shall operate on VHF Channel 13 (156.65 MHz) with low power output having a communication range of approximately ten miles. The frequency has been approved by the Federal Communication Commission.
- n. The most recent contract maintenance dredging within the 40-foot channel was accomplished under Contract No. DACW61-97-C-0029 by Weeks Marine Company. In addition, the Government-owned Hopper Dredge McFarland performed maintenance dredging during FY02/03 to remove shoals located on Mud Island, Kinkora, Penn and Newbold ranges of the 40-foot channel during the periods of 29 August 2002 to 16 September 2002, 26 September 2002 to 10 October 2002, and 24 October 2002 to 6 November 2002. Contract maintenance dredging of the 25-foot channel was last performed by Weeks Marine Company under contract DACW61-95-C-0045. Maintenance dredging of the Fairless Turning Basin was last performed by Weeks Marine Company under DACW61-02-C-0018 during February 2002.
- o. Disposal Areas: The following Government-furnished disposal area are available for this contract:
- a. Palmyra, NJ (Area No.4)
- b. Hawk Island, Delanco, NJ (Area No.12)
- c. Burlington Island Burlington, NJ (Area No. 22B)
- d. Money Island, Falls Township, PA (Area No. 26)
- e. Biles Island, (Area No. 28)
- p. Magnitude of the Contract Work. The estimated value of the contract is between \$1,000,000 and 5,000,000.
- ${\tt q.}$ "Abstract of Bottom Samples" are included as Section 00845 of this contract.
- r. Survey control description sheets are included as Section 00855 of this contract.

SC-6 LAYOUT OF WORK (APR 1965 OCE)

The Contractor shall lay out its work from Government-established survey controls and shall be responsible for all measurements in connection therewith. The Contractor shall furnish, at its own expense, such stakes, templates, platforms, equipment, range markers and labor as may be required in laying out any part of the work from the triangulation stations and bench marks established by the Government. The Contractor shall be responsible for the execution of the work to such lines and grades as may be established or indicated by the Contracting Officer. It shall be the responsibility of the Contractor to maintain and preserve all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through his negligence, prior to their authorized removal, they may be replaced by the Contracting Officer at his discretion. The expense of replacement will be deducted from any amounts due, or to become due, the Contractor. (CENAP)

SC-7 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least forty (40) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a

supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government. (FAR 52.236-1)

SC-8 ENVIRONMENTAL LITIGATION (1974 NOV OCE)

- a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of the contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the SUSPENSION OF WORK clause of this contract. The period of such suspension, delay, or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.
- b. The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment. (CENAP)

SC-9 SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged on laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passing by other vessels of floating plant working navigable channels, as approved by the Commandant, U.S. Coast Guard with respect to vessels in inlands waters (33 CFR 88), as applicable. (CENAP)

SC-10 CONTINUITY OF WORK (APR 1965 OCE)

No payment will be made for work done in any area designated by the Contracting Officer until the full depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the Contracting Officer. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening. The Contractor may be required to suspend dredging at any time when for any reason the gages or ranges cannot be seen or properly followed. (CENAP)

SC-11 FINAL EXAMINATION AND ACCEPTANCE (APR 1965 OCE)

a. As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of

the Contracting Officer will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination the Contractor will be required to remove same by dragging the bottom or by dredging at the contract rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoal may be waived by the discretion of the Contracting Officer. The Contractor or his authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two soundings or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor. The rate of each day in which the Government plant is engaged in such sounding or sweeping operations and/or is enroute to or from the site or held, for the Contractor's convenience, at or near the site for these operations shall be \$3,300.00, except on Saturday, Sunday and holidays when the rate shall be \$3,700.00.

b. Final acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work. (CENAP)

SC-12 SHOALING (1965 APR OCE)

If before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes, redredging at contract price, within the limits of available funds, may be done if agreeable to both the Contractor and the Contracting Officer. (CENAP)

SC-13 INSPECTION (APR 1965)

The inspectors will direct the maintenance of the gauges, ranges, location marks and limit marks in proper order and position; but the presence of the inspector shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications. The Contractor will be required:

- a. To furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boatmen, laborers, a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys, prescribed in the Special Clause entitled "FINAL EXAMINATION AND ACCEPTANCE".
- b. To furnish, on the request of the Contracting Officer or any inspector, suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant and to and from the disposal areas.

Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by

the Contracting officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor. (CENAP)

SC-14 ACCOMMODATIONS AND MEALS FOR GOVERNMENT INSPECTORS (1965 APR OCE)

- a. The Contractor shall furnish regularly to Government inspectors on board the dredge or other craft upon which they are employed a suitable separate room for office. The room shall be fully equipped and maintained to the satisfaction of the Contracting Officer; it shall be properly heated, ventilated, and lighted, and shall have a desk which can be locked, and chair for each inspector, and washing conveniences. The entire cost of the Contractor for furnishing, equipping and maintaining the foregoing accommodations shall be included in the contract price. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost thereof will be deducted from payments to the Contractor.
- b. If the Contractor maintains on this work an establishment for the subsistence of his own employees, he shall, when requested, furnish to inspectors employed on the work, and to all Government agents who may visit the work on official business, meals of a quality satisfactory to the Contracting Officer. The meals furnished will be paid for the Government at a rate of \$5.00 per person for each meal. (CENAP)
- SC-15 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995) EFARS
 - a. This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals, and FAR Part 49.
 - b. Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by the Contractor or sub-contractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial or series for which the Government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule, " Region I. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.
 - c. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.
 - d. When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the Contracting Officer shall request the Contractor to submit either certified cost or

pricing data, or partial/limited data, as appropriate. This data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet. (EFARS 52.231-5000)

Note #1: The small purchase threshold is \$100,000.

Note #2: By submitting cost or pricing data, the Contractor grants to the Contracting Officer (or authorized representative) the right to examine those books, records, documents, and/or other supporting data that will permit evaluation of the proposed equipment costs. This right shall extend for 2 years after expiration of contract performance. After price agreement, the Contractor shall certify that the equipment cost or pricing data submitted are accurate, complete and current.

SC-16 PERFORMANCE EVALUATION OF CONTRACTOR (1985 JAN HQ USACE)

- a. As a minimum, the Contractor's performance will be evaluated upon final acceptance of the work. However, interim evaluation may be prepared at any time during contract performance when determined to be in the best interest of the Government.
- b. The format for the evaluation will be DD 2626, and the Contractor will be rated either outstanding, satisfactory, or unsatisfactory in the areas of Contractor Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards, and Compliance with Safety Standards. The Contractor will be advised of any unsatisfactory rating, either in an individual element or in the overall rating, prior to completing the evaluation, and all Contractor comments will be made a part of the official record. Performance Evaluation Reports will be available to all DOD Contracting offices for their future use in determining Contractor responsibility, in compliance with DFARS 236.201(c)(1). (CENAP)

SC-17 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (OCT 1989)

- a. This clause specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled: DEFAULT (FIXED-PRICE CONSTRUCTION). In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:
 - (1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
 - (2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.
- b. The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. For the purpose of this contract, unusually severe weather is defined as daily precipitation equal to or exceeding 0.5 inches and/or maximum daily temperature not exceeding 32 degrees F.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON (7) DAY WORK WEEK

JAN MAR APR MAY JUN JUL AUG SEP OCT NOV DEC FEB 2 3 3 2 2 2 1.0 6 2 2. 2. 4

c. Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor shall record on the daily CQC report, the occurrence of adverse weather and resultant impact to normal scheduled work. Actual adverse weather days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph b. above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the Contract Clause entitled: DEFAULT (FIXED PRICE CONSTRUCTION). (ER 415-1-15)

SC-18 INSURANCE REQUIREMENTS

Evidence of the following types of insurance shall be provided to the Contracting Officer prior to commencement of work and shall be maintained throughout the period of performance.

- a. General Liability Insurance (Comprehensive form of policy): Bodily Injury Liability \$500,000 per occurrence.
- b. Automobile Liability Insurance (Comprehensive form of policy): Bodily Injury Liability \$200,000 per person and \$500,000 per accident. Property Damage Liability \$20,000 per accident.
- c. Workmen's Compensation and Employer's Liability Insurance: Compliance with applicable workmen's compensation and occupational disease statutes is required. Employer's liability coverage in the minimum amount of \$100,000 is also required."
- d. Applicable Marine Casualty and Marine Workmen's Compensation Insurance: As appropriate for this contract.
- -- End of Special Clauses --

SECTION 00805-1

CONTRACT ADMINISTRATION DATA

G.1 ACCOUNTING AND APPROPRIATION DATA: TO BE FURNISHED AT TIME OF AWARD

G.2 CONTRACT ADMINISTRATION IS RETAINED BY THE CONTRACTING OFFICER:

US Army Engineer District, Philadelphia ATTN: CENAP-CT-C (Maureen Jordan) Wanamaker Building, 100 Penn Square East Philadelphia, Pennsylvania 19107-3390 (215) 656-6763

G.3 PAYMENT BY:

US Army Corps of Engineers FINANCE CENTER 5720 Integrity Drive Millington, Tennessee 38054-5005

G.4 BILLING ADDRESS:

Invoices shall be forwarded as follows:

US Army Corps of Engineers, PHILADELPHIA ATTN: CENAP-OP-TC WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

G.5 TECHNICAL INQUIRIES:

All technical inquiries should be directed to:

(215) 656-6893 (Pre-Award) (215) 656-6750 (Post-Award)



General Decision Number PA030050

General Decision Number PA030050 Superseded General Decision No. PA020050 State: Pennsylvania Construction Type: DREDGING County(ies): STATEWIDE

PENNSYLVANIA All Dredging, except self-propelled hopper dredges, on the Atlantic Coast to the southerly border of the State of Maryland,

& tributary waters emptying into the Atlantic Ocean, the

Chesapeake & Delaware Canal, Baltimore City and Baltimore County

Maryland.

 $\begin{array}{ccc} \text{Modification Number} & \text{Publication Date} \\ & 0 & 06/13/2003 \end{array}$

COUNTY(ies):
STATEWIDE

ENGI0025D 10/01/2002

ENG10023D 10/01/2002			
	Rates	Fringes	
DIPPER & CLAMSHELL DREDGE:			
Operator	28.07	6.45+a+b	
Engineer	24.72	6.45+a+b	
Maintenance Engineer	23.59	5.85+a+b	
Welder	23.22	5.85+a+b	
Mate	21.99	5.85+a+b	
Boat Master	23.24	6.45+a+b	
Boat Captain	22.15	5.85+a+b	
Oiler	18.59	5.25+a+b	
Deckhand; Tug Deckhand	18.13	5.25+a+b	
Scowman	17.88	5.25+a+b	
DRAG BUCKET DREDGE:			
Operator	25.09	6.45+a+b	
Engineer	21.41	6.45+a+b	
Maintenance Engineer	21.21	5.85+a+b	
Mate	19.82	5.85+a+b	
Deckhand	16.17	5.25+a+b	
HYDRAULIC DREDGES:			
Leverman	27.56	6.45+a+b	
Engineer; Derrick Operator	24.17	6.45+a+b	
Chief Mate	23.82	6.45+a+b	
Chief Welder	24.48	6.45+a+b	
Maintenance Engineer	23.59	5.85+a+b	
Electrician	23.43	6.45+a+b	
Welder Dredge	23.21	5.85+a+b	
Spider Barge Operator	23.01	5.85+a+b	
Mate	21.99	5.85+a+b	
Boat Master	23.23	6.45+a+b	
Boat Captain	21.66	5.85+a+b	
Steward	21.94	6.45+a+b	
Oiler	18.59	5.25+a+b	
Deckhand	17.90	5.25+a+b	
Tug Deckhand	18.13	5.25+a+b	
Shoreman	17.90	5.25+a+b	
Assistant Cook	18.00	5.25+a+b	

Night Cook	18.00	5.25+a+b
Messman	17.49	5.25+a+b
Janitor/Porter	17.49	5.25+a+b
Fill Placer	23.82	6.45+a+b
Assistant Fill Placer	21.80	6.45+a+b
COMPANY LEAD DREDGEMAN:		
Lead Dredgeman	27.56	6.45+a+b
TUG BOATS over 1,000 H.P. (with		
master or captain having license		
endorsed for 200 miles off shore)	:	
Tug Master	24.68	6.45+a+b
Tug Captain	23.69	6.45+a+b
Tug Chief Engineer	22.95	5.85+a+b
Tug Engineer	22.48	5.85+a+b
Tug Deckhand	18.13	5.85+a+b
TUG BOATS over 1,000 H.P. (without		
master or captain having license		
endorsed for 200 miles off shore)	:	
Tug Master	23.23	6.45+a+b
Tug Captain	22.15	5.85+a+b
Tug Engineer	22.48	5.85+a+b
Tug Deckhand	18.13	5.25+a+b
DRILL BOATS:	10.10	0.20.4.5
Engineer	23.54	6.45+a+b
Blaster	23.81	6.45+a+b
Driller	23.55	6.45+a+b
Welder	23.30	5.85+a+b
Machinist	23.30	5.85+a+b
Tug Master	20.48	6.45+a+b
Tug Captain	19.53	5.85+a+b
Oiler	20.46	5.25+a+b
Tug Deckhand	15.97	5.25+a+b
Core Driller	18.56	5.25+a+b
DIVERS:	10.00	0.20.4.5
Diver	40.88	6.45+a+b
Standby Diver	27.20	6.45+a+b
Tender	31.46	6.45+a+b
Standby Tender	22.61	5.85+a+b
DREDGING PIPELINE CABLE-LAYING:	22.01	0.00.418
Leverman	28.18	6.45+a+b
Control Tower Operator	24.90	6.45+a+b
Rigger	18.42	5.25+a+b
Line up Operator, End Prep.	17.82	5.25+a+b
Diver	41.77	6.45+a+b
Diver Tender	25.93	6.45+a+b
ENGINEER:	20.95	0.131418
1st	24.90	6.45+a+b
2nd, 3rd & 4th	24.58	6.45+a+b
Electrician	24.48	6.45+a+b
Electro Hydro Tech.	20.14	5.85+a+b
Tug Master	26,15	6.45+a+b
Tug Captain	22.79	6.45+a+b
PREMIUMS: Additional 20% for haza		
FOOTMOTES ADDITIONED TO ADOME COAF		MOTV

PREMIUMS: Additional 20% for hazardous material work FOOTNOTES APPLICABLE TO ABOVE CRAFTS:

a. PAID HOLIDAYS: New Year's Day, Martin Luther King Day, Memorial Day, Good Friday, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day,

and Christmas Day

b. VACATION: Seven percent (7%) of the straight time rate multiplied by the total hours worked.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U. S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final. ${\tt END}$ OF GENERAL DECISION

General Decision Number PA030006

General Decision Number PA030006

Superseded General Decision No. PA020006

State: Pennsylvania Construction Type:

HEAVY HIGHWAY
County(ies):

BUCKS DELAWARE PHILADELPHIA CHESTER

MONTGOMERY

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS Modification Number Publication Date

0 06/13/2003

COUNTY(ies):

BUCKS DELAWARE PHILADELPHIA CHESTER

MONTGOMERY

BOIL0013C 08/30/2002

Rates Fringes
BOILERMAKERS 31.13 14.84

CARP0454D 07/01/2002

Rates Fringes
PILEDRIVERMEN 28.50 17.74+A

FOOTNOTE:

A. PAID HOLIDAYS: Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (provided the employee works the day before the holiday and the day after the holiday)

CARP0612A 05/01/2002

Rates Fringes
CARPENTERS 28.40 13.96+A

FOOTNOTE:

A. PAID HOLDIDAY: Labor Day

CARP1906A 07/01/2002

Rates Fringes 27.77 14.96

ELEC0098A 09/02/2002

Rates Fringes

BUCKS COUNTY: Starting at the Delaware River and following the west limits of the Borough of Bristol, along the continuation of U.S. Highway 13 and under the Pennsylvania Railroad Bridge to Route 09113, north 09113 to Route 152, north along Route 152 to

the Humeville Road, east on Humeville Road to Route 333, north on Route 344 to the junction of Spurs 281 and 252, continue north on Spur 252 to Route 09028, west on 09028 to Route 152, north on 152 to TR 232, north on TR 532 to Tr 113, north on TR 113 to TR 232 at Anchor Inn, northeast on TR 232 and continue northeast along Rounte 659 to Route 09060, west on 09060 to Route 402, north on 402 to the Borough line at the southwest corner of the Borough of New Hope. The Bouough of New Hpoe is excluded. Starting at the Delaware at the Delaware River and proceeding southwest along the Plumstead-Solebury and the Plumstead-Buckingham Township lines to Route 09064, northwest on 09064 to U.S. Highway 611 south on 611 to the spur of Route 270, northwest along the spur to Route 397, Southwest on 397 to Route 350, southeast on 350 to Route 395, southwest on 395 to Route 09060, southeast on 09069 to Route 09041 southwest on 09041 to the Montgomery County line.

DELAWARE COUNTY: That portion east of a line following State Highway 320 from Montgomery County to Maple, then along the Springfield Road to Saxer Ave, along Saxer Avenue to Powell Road, along Powell Road to State Highway 420 and continuing in a straight line to the Delaware River.

MONTGOMERY COUNTY: That portion southeast of a line following Lower State Road from Bucks County southwest to the Bethlehem Pike (U.S Highway 309), south on the Bethlehem Pike to the Penllyn Pike, southwest on the Penllyn and Blue Bell Pikes to the Wissahickon Creek, southeast on the Wissahickon Creek to the Butler Pike to North Lane near Conshohocken Borough, southwest on North Lane to Schuylkill River and continuing southeast in a line to the Spring Mill Road and southwest on the Spring Mill Road to Delaware County.

PHILADELPHIA COUNTY

ELECTRICIANS 34.69 14.11

ELEC0102D 05/01/2000

Rates Fringes

BUCKS COUNTY (Plumstead, Bedminister, Tinicum, Nockomixon, Bridgeton and Durham Townships in their entireties, and that portion of Haycock and Springfield Townships east of a line following State Highway 412, from Northampton County south to Route 09071 to State Highway 212, along Highway 212 to Route 09068, and along 09068 to State Highway 313. Also included is that portion of Bublin Borough east of State Highway 313

ELECTRICIANS 31.31 37.75%

ELEC0126D 12/03/2000

Rates Fringes CHESTER, DELAWARE, MONTGOMERY, PHILADELPHIA, AND REMAINDER OF BUCKS COUNTY

LINE CONSTRUCTION:

Lineman	32.23	18%+3.30
Winch Truck Operator	22.56	18%+3.30
Truck Driver	20.95	18%+3.30
Groundman	19.34	18%+3.30

ELEC0269A 10/01/2000

Rates Fringes

BUCKS COUNTY (Area East of a line starting at the Delaware River

and following the west limits of the Borough of Bristol, along the continuation of U.S. Highway 13 and under the Pennsylvania Railroad Bridge to Route 09113, north along 09113 to route 152,

north along route 152 to the Hulmeville Rd., east on the Hulmeville to Route 344, north on route 344 to the junction of Spurs 281 and 252 continue north on spur 252 and route 09028, west on 09028 to Route 152, north on 152 to TR 532, north on TR 532 to TR 113, north on TR 113 to TR 232 as Anchor Inn, northeast on TR 232 and continue northeast along 659 to Route 09060, West on 09060 to Route 402, north on 402 to the Borough Line at the southwest corner of the Borough of New Hope; including the Boroughs of New Hope and Bristol)

ELECTRICIANS 33.08 29%+5.00

ELEC0269C 04/01/2003

Rates Fringes
BUCKS COUNTY - That portion east of a line starting at the
Delaware River and following the west limits of the Borough of
Bristol, along the continuation of U.S. Highway 13 and under the
Pennsylvania Railroad Bridge to Route 09113, north along 09113 to
route 152, north along route 152 to the Hulmeville Rd., east on
the Hulmeville to Route 344, north on route 344 to the junction
of Spurs 281 and 252 continue north on spur 252 and route 09028,
west on 09028 to Route 152, north on 152 to TR 532, north on TR
532 to TR 113, north on TR 113 to TR 232 as Anchor Inn, northeast
on TR 232 and continue northeast along 659 to Route 09060, West
on 09060 to Route 402, north on 402 to the Borough Line at the
southwest corner of the Borough of New Hope. The Boroughs of New
Hope and Bristol are included.

LINE CONSTRUCTION:

Lineman, Cable Splicer, Heavy Equipment Operator

37.21 44.3%

Groundman, Truck Driver,

and Winch Operator 29.77 44.3%

ELEC0313G 12/01/2000

Rates Fringes

DELAWARE COUNTY: (That portion south of U.S. Highway No. 1 and west of U.S. Highway No. 202) Chester County (That portion South and east of U.S. Highway 1)

ELECTRICIANS 26.82 47.62%

ELEC0375A 12/01/2002

Rates Fringes

BUCKS COUNTY (East Rock Hill, West Rock Hill, Milford and Richland Towships in their entirety and that portion of Haycock and Springfield Townships west of a line following State Highway 212 from Northampton County South to Route 09071 along 09071 to state Highway 212, along Highway 212 to Route 09068 and along 09068 to State Highway 313) MONTGOMERY COUNTY (Upper Hanover Twp.in its entirety)

ELECTRICIANS 29.86 15%+3.25

ELEC0380A 09/01/2002

Rates Fringes

BUCKS COUNTY (Hilltown and New Britain Townships in their entirety; that portion of Telford Borough Northeast of County

Line Road (Main Street) and bounded by West Rock Hill and Hilltown Township that portion of Dublin Borough West of State Highway 313, and that portion of Doylestown and Warrington Townships and Doylestown Borough Northwest of a line following U.S. Highway 611 South from Route 09064 to the spur of Route 270, and proceeding Northwest along the spur to Route 397, Southwest on 397 to Route 350, Southeast on 350 to Route 395, Southwest on 395 to Route 09069, Southeast on 09069 to Route 09041, Southwest on 09041 to the Montgomery County Line) DELAWARE COUNTY (The portion of Radnor Township North of U.S Highway 30 and West of State Highway 320)

MONTGOMERY COUNTY (The portion Northwest of a line following Lower State Road from Bucks County Southwest to Bethlehem Pike (U.S. Highway 309), South on Bethlehem Pike to Penllyn Pike, Southwest on the Penllyn and Blue Bell Pikes to Wissahickon Creek to the Butler Pike, Southwest Wissahickon Creek to Butler Pike, Southwest on Butler Pike, to North Lane near Conshohocken Borough, Southeast on North Lane to the Schuylkill River and continuing Southeast in a line to Spring Mill Road, Southwest on Spring Mill Road to Delaware County; but excluding Upper Hanover, Douglas, Upper Pottsgrove, West Pottsgrove Townships and also excluding that portion of the Borough of Pottstown North and West of a line drawn Northeast on Kein Street from the Schuylkill River to Reading Railroad Northwest on the railroad to Madison Street, to High Street, East on High Street to Green Street, North on Green Street and Northeast on Mintzer Street to Lower Pottsgrove Township Line, along this township line and the borough line Northwest to Adams Street and Beehive Road, Northeast on Beehive Road to the Township Line at Mervine Street)

CHESTER COUNTY (East Coventry. East Vincent, West Vincent, East Pikeland, West Pikeland, Uwchlan, Upper Uwchlan, East Brandywine, Schuylkill and Charleston Townships in their entirety, and that portion of Clan, East Clan, East Whiteland & West Whiteland, Tredyffrin, Willistown, Easttown Townships and Borough of Downingtown north of U. S.Highway 30)
ELECTRICIANS
33.08
35%

ELEC0654A 06/04/2001

Rates Fringes
DELAWARE COUNTY (The portion south of U.S. Highway 30 and north of that part U.S. Highway 1 between U.S. Highway 202 and the Chester County Line, and east of that part of U.S. Highway 202 between U.S. Highway 1 and the Delaware Line, and west of a line extending from Montgomery County along State Route 320 to Maple, then along the Springfield Road to Saxer Avenue, along Saxer Avenue to Powell Road; along Powell Road to State Highway 420; along 420 and continuing in a straight line to the Delaware River in the State of Pennsylvania) CHESTER COUNTY (That portion south of U.S. Highway 30 and north of that part of U.S. Highway 1) ELECTRICIANS

30.44

4.87+8.74%

ELEC0743A 09/01/2001

Rates Fringes
CHESTER (Coatesville, Honey Brook, South Coventy, Valley,
Wallace, Warwich, West Brandywine, West Clan, and West Nantmeal
Twps); AND MONTGOMERY (Douglas, Pottstown, Upper Pottsgrove, and

24.55 3%+7.37

ELEC0743G 09/01/2001

Rates

CHESTER COUNTY (The portion of Sadsbury and West Sadsbury Township north of U.S. Highway 30)

ELECTRICIANS

23.44

3%+7.37

ENGI0542D 05/01/2002

POWER EQUIPMENT OPERATORS:

Rates Fringes

	~						
HEAVY,	HIGHWAY,	AND	WATER	LINE	CONSTRUCTION	(Off	Plant Site)
GROUP	1				27.77		14.44+A
GROUP	2				27.52		14.37+A
GROUP	3				24.05		12.55+A
GROUP	4				23.74		12.47+A
GROUP	5				22.02		11.96+A
GROUP	6				21.03		11 67+A

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Handling steel and stone in connection with erection, cranes doing hook work, any machine handling machinery, helicopters, concrete pumps building machines similar to the above, including remote control equipment.

GROUP 2: All types of cranes, All types of backhoes, Cableways, Draglines, Keystones, all types of shovels, Derricks, Pavers 21E and over, Trenching machines, Trench shovel, Graddalls, Front-End loaders, Boat Captain, Pippin type backhoes, Tandems scrapers, Towers type crane operation erecting, Dismantling, Jumping or Jacking, Drills (self-containes), (drillmaster type) forklift (20 ft. and over), Moter patrols (fine grade), Batch plant with mixer, Carryalls, Scraper, Trounapulls, Roller (Hith Grade Finishing), Spreaders (asphalt), Bulldozers and Tractors, Mechanic welder, Conveyor loaders (euclid-type wheel), Concrete pump, Milling Machines, Hoist with two towers, Building hoist double drum (unless used as a single drum), Mucking machines in tunnel, All auto grade and concrete finishing machines, Bundle pullers/extractors (tublar), toxic/hazardous waste removal rate 20 per cent added to all classificiation, bobcat, side broom, directional boring machines, vermeet saw type machines (other than hand held) tractor mounted hydro axe, chipper with boom, all machine similar to the above includidng remote control equipment.

GROUP 3: Asphalt plant engineers, Well drillers, Ditch witch (small trencher), Motor patrols, Fine grade machines, Ten-ton roller (grade fill stone base), Concrete breaking machines, Guilloline only, Stump grinder, Conveyors (except building conveyors), Fork lift trucks of all types, High pressure boliers, Machine similar to the above, including remote control equipment.

GROUP 4: Seaman, Pulverzer form line grader, Farm tractors, road finishing, Concrete spreader, Power broom (self-contained), Seed spreader, Grease truck.

GROUP 5: Compressors pumps, Well point pumps, Welding machines Tireman, Power equipment, Maintenance engineer (power boats), and macnines similar to the above.

GROUP 6: Fireman, Oilers and deck hands (personnel Boats),

grease truck.

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day and Christmas Day
TOXIC/HAZARDOUS WASTE REMOVAL* Add 20 per cent to basic hourly rate for all classifications

IRON0068D 07/01/2002

Rates Fringes
BUCKS COUNTY (Remainder)
IRONWORKERS, Structural, Ornamental,
and Reinforcing 27.76 22.35

IRON0161A 07/01/2002

Rates Fringes
BUCKS COUNTY (Includes the towns of Bensalem, Breadysville,
Bristol, Churchville, Cornwells Heights, Davisville, Eddington,
Feasterville, Hartsville, Johnsville, Line Lexington, Neshaminy,
Southhampton, Tradesville, Trevose, Unionville, Warminster, and
Warrington), DELAWARE (North of a line running along State Route
352 to right on Stae Route 291 to State Line); CHESTER (Includes
the towns of Alsham, Anselma, Bacton, Berwyn, Cedar Hollow,
Charlestown, Chester Springs, Cromby, Devon, Devault, Daylesford,
Diamond Rock, Dutton Mill, Frazer, Goshenville, Howellville,
Kimberton, Ludwig Corner, Paoli, Mattews, Perkiomen Junction,
Phoenixville, Rapps Corner, Rocky Hill, Strafford, Sugartown,
Tanguy, Valley Forge, Valley Store, White Horse, Williams
Corner); MONTGOMERY (Remainder); and PHILADELPHIA COUNTIES
IRONWORKERS:

Rigger and Machinery Mover 28.65 14.00

IRON0401A 07/01/2002

Rates Fringes
BUCKS (Includes the towns of BEnsalem, Breadysville, Bristol
Churchville, Cornwells Heights, Davisville, Eddington,
Feasterville, Hartsville, Johnsville, Line Lexington, Neshaminy,
Southampton, Tradesville, Trevose, Unionville, Warminster, and
Warrington): DELAWARE (North of a line running along State Rt 352
to right on State Rt 291 to State Line); CHESTER (Includes the
towns of Aldham, Anselma, Bacton, Berwyn, Cedar Hollow,
Charlestown, Chester Springs, Cromby, Devon, Devault, Daylesford,
Diamond Rock, Dutton Mill, Frazer, Goshenville, Howellville,
Kimberton, Ludwigs Corner, Paoli, Matthews, Perkiomen Junction,
Phoenixville, Rapps Corner, Rocky Hill, Strattford, Sugartown,
Tanguy, Valley Forge, Valley Store, White Horse, Williams Corner,
and Wilsons Corner); MONTGOMERY (Remainder); and PHILADELPHIA COUNTIES
IRONWORKERS:

Structural and Ornamental 33.75 15.75

IRON0405A 07/01/2002

Rates Fringes
BUCKS (Includes the towns of Bensalem, Breadysville, Bristol,
Churchville, Cornwell Heights, Davisville, Eddington,
Festerville, Hartsville, Johnsville, Line Lexington, Neshaminy,
Southhampton, Transville, Trevose, Unionville, Warminister, and
Warrington), DELAWARE (North of a line running along State Route
352 to right on State Route 291 to State Line); CHESTER (Includes

the towns of Aldham, Anselma, Bacton, Berwyn, Cedar Hollow, Charlestown Chester Springs, Cromby, Devon, Devault, Daylesford, Diamaond Rock, Dutton Mill, Frazer, Goshenville, Howellville, Kimberton, Ludwigs Corner, Paoli, Mathews, Perkiomen Junction, Phoenixville, Rapps Corner, Rocky Hill, Strafford, Sugartown, Tanguy, Valley Forge, Valley Store, White Horse, Williams Corner, and Wilsons Corner); MONTGOMERY (Remainder); AND PHILDELPHIA COUNTIES

IRONWORKERS:

Reinforcing Steel Mesh,

Rebar Work 29.29 14.55

IRON0420G 07/01/2002

Rates Fringes

MONTGOMERY COUNTY (Anise, Berguy, Congo, Douglas, East Greenfield, East Limerick, East Slaford, East Zieglerville, Engleville, Fagleysville, Ford, Gilbertsville, Green Lane, Hanover, New Perksionenville, Niato, Palm, Obelish, Pennsburg, Perkiomen, Pottstown, Royerfored, Roytown, Sammamansville, Tylerport, Upper Hanover, Upper Pottsgrove, Upper Wodall, West Limerick, West Salford, and West Zieglerville Townships) IRONWORKERS:

Projects \$100,000,000 and

greater, all work 23.25 12.95
Projects less than \$100,000,000 22.75 12.95

IRON0451D 07/01/2002

Rates Fringes

CHESTER (Remainder of County), AND DELAWARE (Remainder of County) COUNTIES

IRONWORKERS:

Structural, Ornamental, and

Reinforcing 25.60 15.05

LABO0401A 05/01/2002

		Rates	Fringes
LABORE	RS:		
GROUP	1	20.60	13.75
GROUP	2	20.40	13.75
GROUP	3	20.30	13.75
GROUP	4	20.45	13.75
GROUP	5	20.20	13.75
GROUP	6	20.85	13.75
GROUP	7	20.70	13.75
GROUP	8	20.55	13.75
GROUP	9	21.10	13.75
GROUP	10	15.00	13.75
GROUP	11	20.60	13.75
GROUP	12	24.29	13.75

LABORERS CLASSIFICATIONS

GROUP 1: Multiple wagon drill operator

GROUP 2: Finished surface asphalt raker; pipelayers; conduit and duct layer; jackhammer operator; paving breaker; experienced pipelayer or caulker (all joints up to within 5 ft of builing foundation line)

GROUP 3: Other pneumatic tool operators; laborers stripping concrete forms, carrying or handling lumber, steel, steel mesh,

and other concrete materials; form pinners; tool room men; mortar mixers; concrete pitman & spaders; grademen; asphalt shovelers; setting cut stone, granite or artificial stone; hod carriers; scaffold builders; all other laborers with the exception of workers in compressed air, relief joints and approach slab; men working in sheeting, pouring concrete, assembling and placing gabians GROUP 4: Wagon drill operators GROUP 5: Yard workers: Laborers, sscale mixmen, burnermen, dustmen, feeder GROUP 6: Free air tunnel: Miner bore driver, blaster, drillers pneumatic shield operator; miners GROUP 7: Form setters; circular caisson excavation bottom men underpinning excavation bottom men, welders, burner and air tugger GROUP 8: Trackmen; brakemen; groutmen; bottom shaft men; all others in free air tunnels GROUP 9: Welders and burners GROUP 10: Flaggers GROUP 11: Powderman GROUP 12: Toxic/hazardous waste handler LABO0402A 01/01/2003 Rates Fringes LANDSCAPING: 11.98+A Landscape Laborers 16.48 Farm Tractor Driver, Hydroseeder Nozzleman, Mulcher Nozzleman 16.98 FOOTNOTE: A. PAID HOLIDAYS: Independence Day, Labor Day, and Thanksgiving Day PAIN0021D 05/01/2002 Rates Fringes PAINTERS 27.46 12.50 30.99 Bridge PLAS0592A 05/01/2003 Fringes 24.50 Rates CEMENT MASONS PLUM0420A 05/01/2002 Rates Fringes STEAMFITTERS 33.19 PLUM0690H 11/01/2002 Rates PLUMBERS 32.99 TEAM0470B 05/01/2001 Rates Fringes TRUCK DRIVERS: 8.0725+A+B GROUP 1 19.60 GROUP 2 19.70 8.0725+A+B GROUP 3 19.95 8.0725+A+B FOOTNOTES FOR TRUCK DRIVERS:

A. PAID VACATION: Employee will earn one vacation day for

- every two months up to a maximum of five vacation days per calendar year. During each two consecutive months period, employee must have worked twenty-six days in that two month period. After 130 workdays the employee will be entitled to all days of vacation.
- B. PAID HOLIDAYS: Memorial Day, Independence Day, Labor Day and Veterans Day and five personal holidays provided such employee works the scheduled work day before and after said holiday; and employee gives employer one week's notice requesting a personal holiday. The eligibility for personal holiday every two months up to a maximum of five consecutive month period, employee must have worked 26 days in that two month period. After 130 work days the employee will be entitled to all personal holidays.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - Stake body truck (single axle, dumpster)

GROUP 2 - Dump trucks, tandem and batch trucks, semi-trailers, agitator mixer trucks, and dumpcrete type vehicles, asphalt distributors, farm tractor when used for transportation, stake body truck (tandem)

GROUP 3 - Euclid type, off-highway equipment or belly dump trucks and double hitched equipment, staddle (ross) carrier, low-bed trailers

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

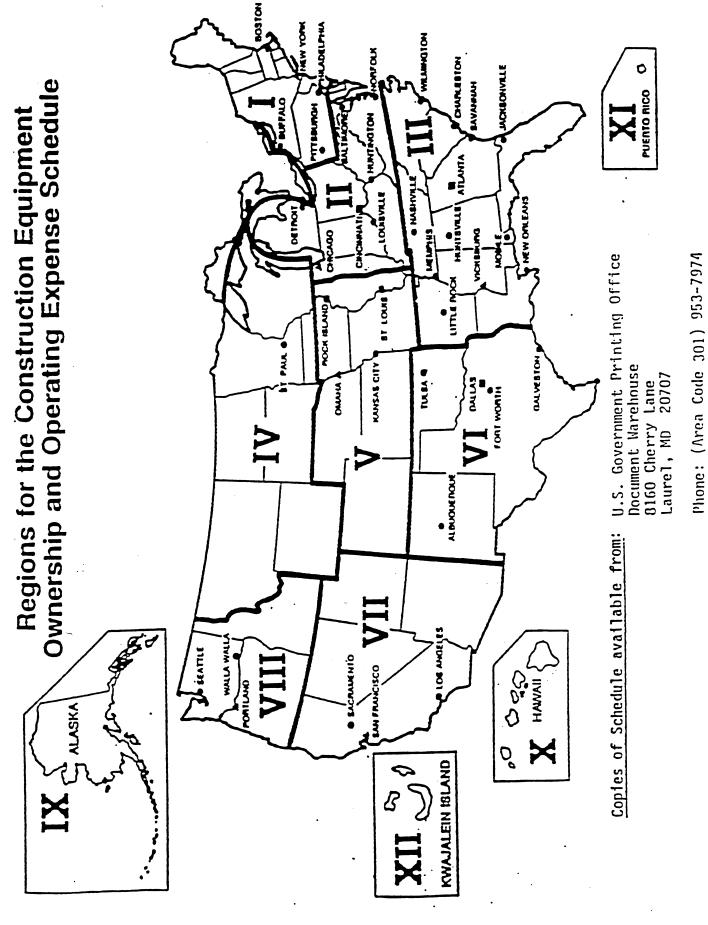
Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final. END OF GENERAL DECISION



SAMPLING BY: R. Wagner	DENSITY BY:	M. Kornsey & J. Gray		REMARKS	Sand	Sand, Mud and Small Shells	Mud	Sand, Mud and Decayed Vegetation		Lower 0.9' Mud	Upper 1.0' Mud Lower 0.9' Mud				
6			DENSITY	(g/L)	1874	1836	1337	1526	1205	1214	1137 1206				
NG: 14, 15 and 16 April 2003			BOTTLE	DEPTH											
LING: 14, 15 and			SAMPLE	RETAINED					1.9	=	2.0				
DATE OF SAMPLING:			HARPOON	DEPTH					23.3	=	39.7				
			INE	HEAVY	1 2003 38.8	1 2003 39.3	1 2003 36.4	15.8	19.7	=	35.3				
	DATUM	Project	LEADLINE	LIGHT	14 April 2003 38.8 38	16 April 2003 38.6 39	15 April 2003 34.2 36	15.0	18.6	=	33.1				
SAMPLES			MACHINE	SOUNDING	38.5	37.8	34.2	13.9	16.4	=	32.6				
ABSTRACT OF BOTTOM SAMPLES		renton	NORMAL	DISTANCE	161' E of CL	140' W of CL	288 W of CL	124' W of CL	63' W of CL	=	608' W of CL "				
BSTRACT		Delaware River, Phila. To Trenton	STATION		19+382	67+605	110+266		209	=	121+970 (
	IOCATION	Delaware Riv	NUMBER		4	2P	38	4P	5HA	5HB	6HA 6HB				

REPLACES EDITION OF 1 FEB 57, WHICH IS OBSOLETE

.

DELLWARE RIVER

PHILADELPHIA TO TRENTON

COMPARISON OF PHILADELPHIA TO TRENTON PROJECT DATUM AND MEAN LOW WATER DATUM

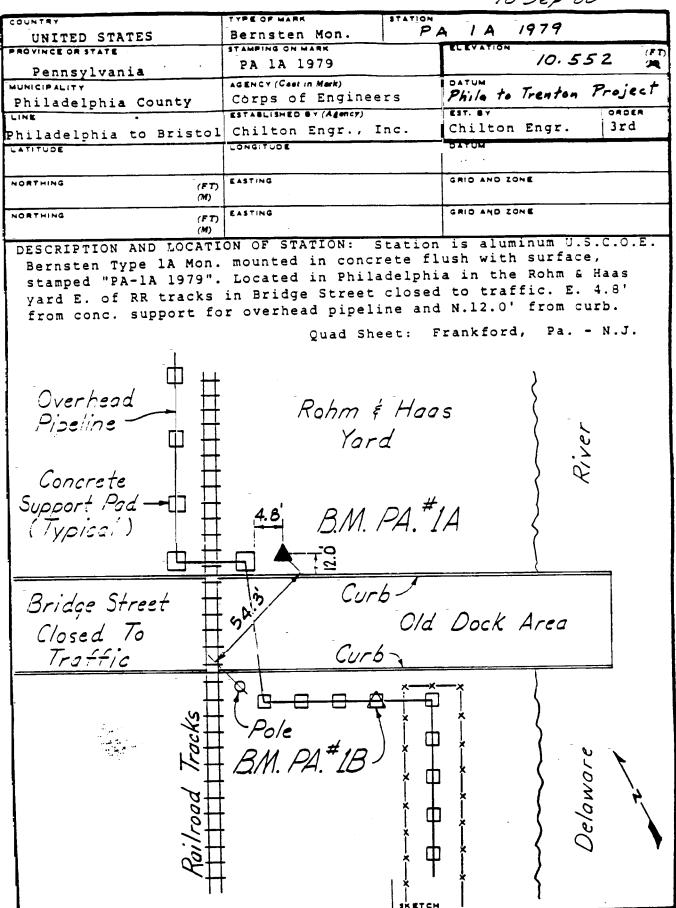
Mean Low Water Datum is above Philadelphia to Trenton Project Datum by the amounts listed below.

STATION	TO	STATION	FT.	For Sounding
0+000		60+990.48	0.1 =	60+990.46
€0+990.48		86+553.68	0.2 =	88+553.68
88+553.68		160+325.48	0.3 =	160 + 325.48

NOTE: To convert benchmark elevations given in Phila. to Trenton Project Datum to Mean Low Water Datum, subtract the proper correction given above from Phila. to Trenton Project Datum Bench Mark elevations.

ું, દે

DESCRIPTION OR RECOVERY OF BENCH MARK

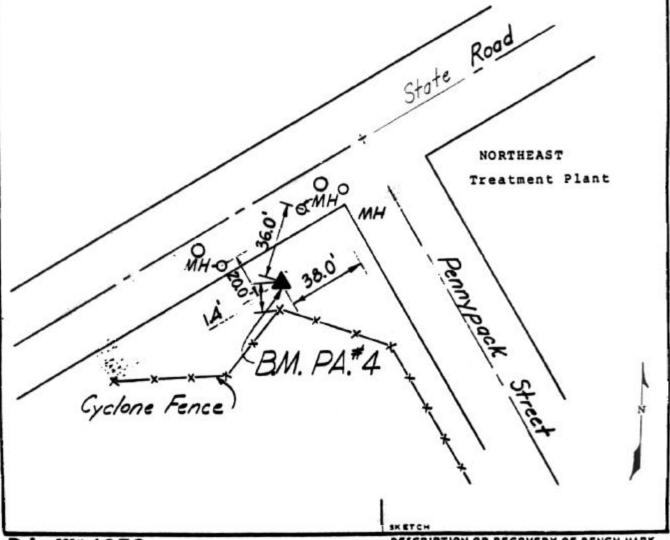


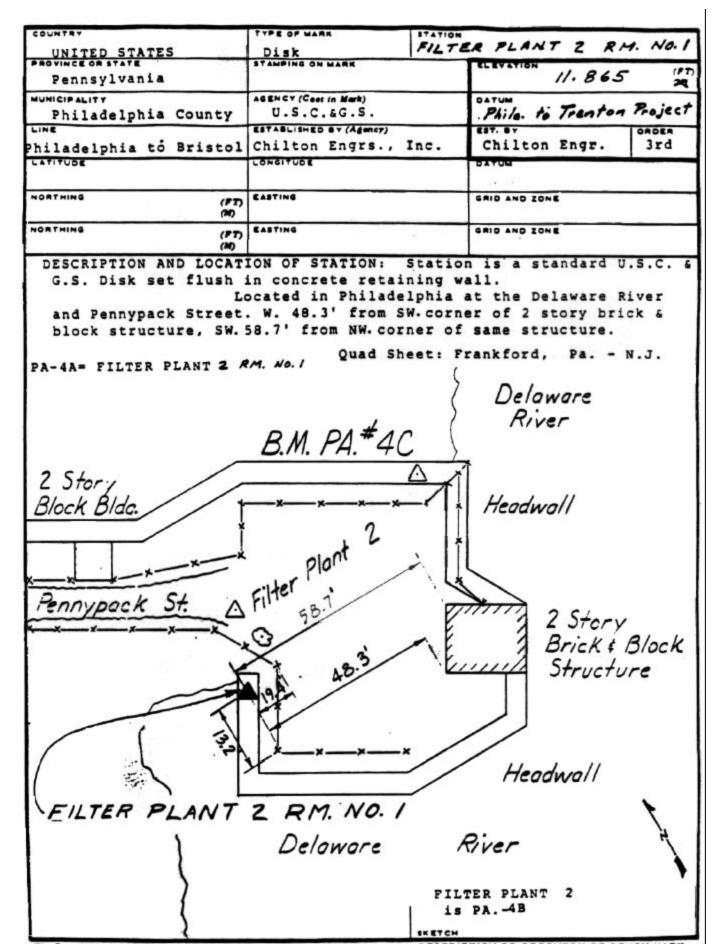
		10	500 8.	9
COUNTRY	TYPE OF MARK STATION	0.4 / 8	1979	
UNITED STATES	Disk STAMPING ON MARK	PA /B	/ 7 / 7	
	PA 1B 1979		10.14	(FT)
Pennsylvania	AGENCY (Cast in Mark)	DATUM		2 2
	Corps of Engineers	Phila. to Ti	renton	Project
Philadelphia County Link	ESTABLISHED BY (Agency)	657. BY		ORDER
Philadelphia to Bristol	Chilton Engr., Inc.	Chilton Er	ngrs.	3rd
LATITUDE	LONGITUDE	DATUM		
·				
NORTHING (FT)	EASTING	GRID AND ZONE		
(M)	·		· · · · · · · · · · · · · · · · · · ·	
NORTHING (FT)	EASTING	GRID AND ZONE		
(M)		<u> </u>		
	ON OF STATION: Station			
Disk set flush with	top in concrete support	pad for ove	erhead	pipe.
Stamped "PA-1B 1979"	. Located in Philadelp	nia in the l	KOUM &	naas
yard E. of RR tracks	in Bridge Street close	d to traille	5. 5. u = 0'	14.9°
	from 1st concrete suppo	rr pad and (m. 3.9	LIOM
fence.			_	
	Quad Sheet:	Frankford,	Pa-N.J	
		1		
Cverhead		<u> </u>		
- · · · · · · · · · · · · · · · · · · ·	Rohm & H	oos }		
Pipeline -	Yord	}	-	
└ ┪ ┼┼	Tord	}	٥.	
- , l)	Ž.	
Concrete	Jord J.			
Support Pad-[]				
	BM. PA.#1A			
(Typisal)	D./VI. / A. 1/	7 (
<u>- + - +</u>		>		
		Ĺ		3
	Cuchel			-
Bridge Street Curb Cld Dock Area				
Closed To	3			
	61.4 5.9			
Troffic H		Curb.]
	C 7 4 1 ××-			_
	C			
<i>ω</i> <u>Π</u>		- - -		
44	Pole			
Zocks	B.M. P.A. #18 1	ř		
_2++	D./VI. MA. 10 1]	ً فِي	-
\sim \uparrow	ſ \ \ -		Delaware	7
\downarrow \Box	* - <u>1</u>	* (2	4
pp0_	Į Ų	- -	2	
Į į	*	* }	2/;	•
· :>	ŢŢ	Į (\sim	•
\ ~6+:		ĵ /	7	
 	i	1 (
	SKETCH			

UNITED STATES	Bernsten Mon.	TATION PA 4 1979
Pennsylvania	PA 4 1979	28. 886 ×
MUNICIPALITY Philadelphia County	AGENCY (Cost in Mark) Corps of Engineers	Phila to Trenton Project
Philadelphia to Bristol	Chilton Engr., Ir	EST. BY ORDER
CATITUDE	CONGITUDE	BATUM
NORTHING (FT)	EASTING	GRIO AND ZONE
NORTHING (FT)	EASTING	GRIO AND ZONE

DESCRIPTION AND LOCATION OF STATION: Station is aluminum U.S.C.O.E. Bernsten Type 1A. Mon., stamped, "PA-4, 1979". Located in Phila. at the S.E. corner of State Road & Pennypack St. Mounted in conc. and set flush with surface 38.0' S.W. of M.H. at S.E. cor. of intersection. 36.0' S. of M.H. on E. side of State Rd. and 20' S.E. of M.H. near E. curb of State Road S. of intersection with Pennypack St.

Quad Sheet: Frankford Pa. - N.J



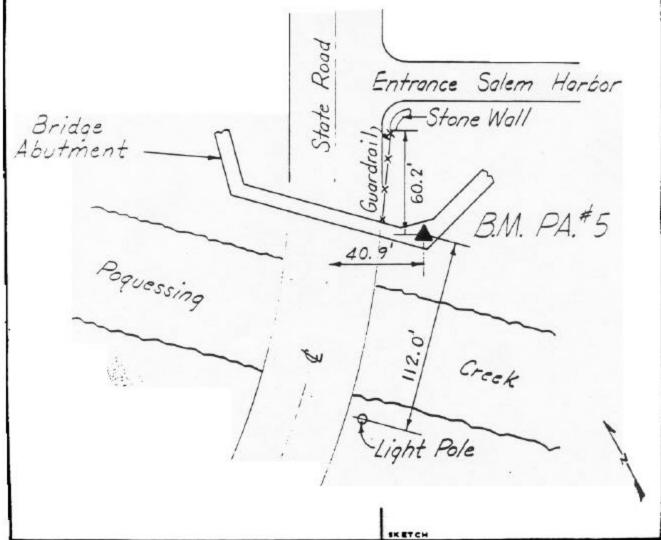


The second secon			
UNITED STATES	Disk STATE	PA 5 1979	
Pennsylvania	PA 5 1979	24.43/ P	
Bucks County	AGENCY (Cast in Mark) Corps of Engineers	Phila. to Trenton Project	
Philadelphia to Bristol	Chilton Engr., Inc.	Chilton Engrs. 3rd	
CATITUDE	LONGITUDE	BAYON	
NORTHING (FT)	EASTING	GRID AND ZONE	
NORTHING (FT)	EASTING	GRID AND ZONE	

DESCRIPTION AND LOCATION OF STATION: Station is standard U.S.C.O.E. disk set in conc. and stamped "PA-5, 1979". Located in Bucks Co. at N.E. corner of Northern bridge abutment over Poquessing Cr. at State Rd. 60.2' S. of South end of stone wall near entrance to Salem Harbor complex. 40.9' E. of centerline of State Rd. and 112.0' N. of Light Pole on S. side of Poquessing Cr. E. of State Rd.

Quad Sheet:

Beverly



10 See 80

UNITED STATES	Disk ST.	PA 7 1979
Pennsylvania	PA 7 1979	/3. 464 A
Bucks County	Corps of Engineers	Phila. to Tranton Project
Philadelphia to Bristol	Chilton Engr., Inc.	Chilton Engrs. 3rd
LATITUDE	LONGITUDE	DAYUM
NORTHING (FT)	EASTING	GRIO AND ZONE
NORTHING (PT)	EASTING	GRID AND ZONE

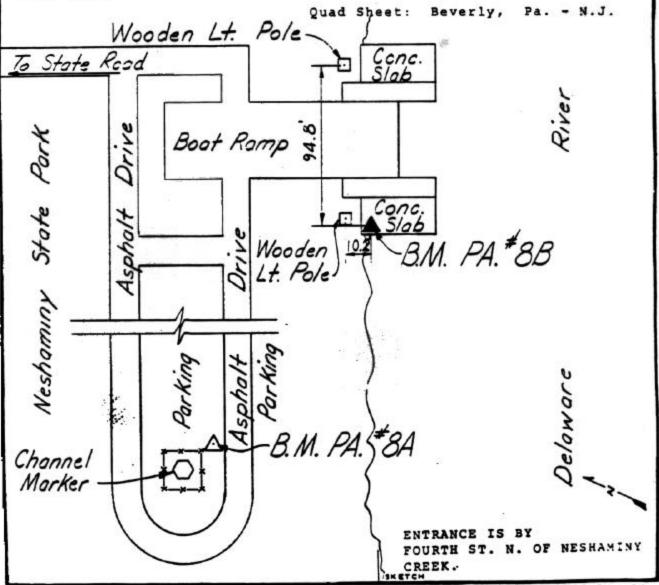
DESCRIPTION AND LOCATION OF STATION: Station is standard U.S.C.O.E. Disk Stamped "PA-7, 1979". Located on the E. side of State Rd. N. of American Drive in Bucks Co., Pa. Disk is flush with top of headwall of bridge over creek. 118.0' N.E. of Electric Pole on E. side of State Rd. 40.2' N.E. of sewer M.H. on E. side of State Rd. and 65.2' S.E. of B.T. Pole #11 on W. side of State Rd.

> Quad Sheet: Beverly



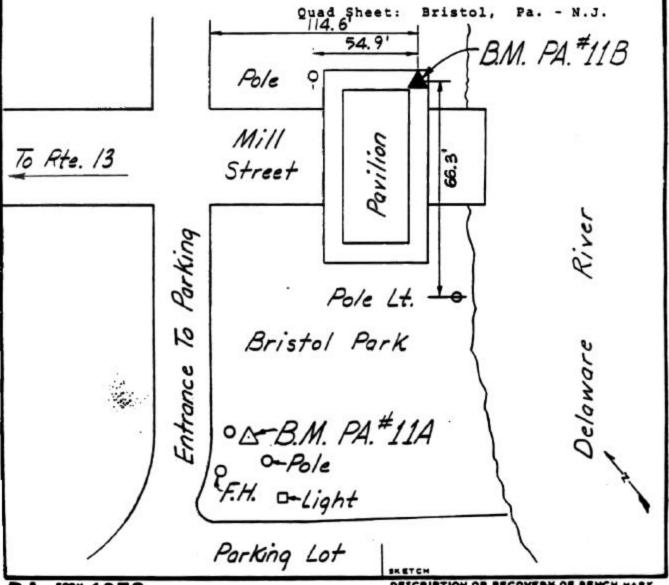
UNITED STATES	Disk 61	PA 88 1979
Pennsylvania	PA 8B 1979	10. 352 W
Bucks County	Corps of Engineers	Phila to Trenton Project
Line Philadelphia to Bristol	Chilton Engr., Inc	EST. BY ORDER
LATITUDE	LONGITUDE	BAYUM.
NORTHING (FT)	EASTING	GRID AND ZONE
HORTHING (FT)	EASTING	GRIO AND ZONE

DESCRIPTION AND LOCATION OF STATION: Station is standard U.S.C.O.E. Disk set flush in concrete slab. Stamped "PA 8B 1979". Located in concrete slab South of boat ramp in Pennsylvania State Park. E. 10.2' from wooden pole light and SE.94.8' from wooden pole light N. of boat ramp.



		10 26 00
UNITED STATES	Disk STATION	PA 118 1979
PROVINCE OR STATE PENNSYLVANIA	PA 11B 1979	8.862 %
Bucks County	Corps of Engineers	Phila. to Trenton Project
Philadelphia to Bristol	Chilton Engr., Inc.	Chilton Engrs. 3rd
LATITUDE	LONGITUDE	DAYON
HORTHING (FT)	EASTING	GRID AND ZONE
MORTHING (PT)	EASTING	GRID AND ZONE
DESCRIPTION AND LOCAT	ION OF STATION: Stati	on is standard U.S.C.O.E

DESCRIPTION AND LOCATION OF STATION: Station is standard U.S.C.O.E. Disk set flush in concrete, Stamped "PA-11B-1979". Located in Bucks County in Bristol Park at the NE corner of the pavilion at end of Mill Street along the Delaware River. E. 114.6' from park drive N. of Mill Street, E. 54.9' from pole just W. of pavilion and N. 66.3' from a small light along the river S. of the pavilion



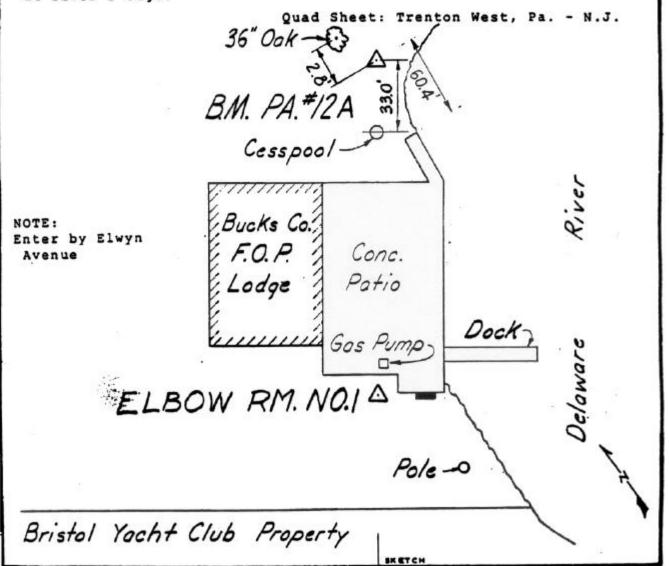
DA . 504.1958

DESCRIPTION OR RECOVERY OF BENCH MARK (TH 5-237)

30May 84 10 Sep 80

30 Play 04	10 sep 80
BERNSTEN MON.	PA 12A 1979
PA 124 1980	10.177 00
CORPS OF ENGINEERS	Phila to Trenton Project
	CHILTON ENGRS. 3rd
LONGITUDE	DAYOM
EASTING	GRIO AND IONE
EASTING	GRID AND ZONE
	BERNSTEN MON. STAMPING ON MARK PA 12A 1980 AGENCY (Cast in Mark) CORPS OF ENGINEERS ESTABLISHED BY (Agency) CHILTON ENGR., INC. LONGITUDE

DESCRIPTION AND LOCATION OF STATION: Station is aluminum U.S.C.O.E. Bernsten Type 1A Mon. mounted in concrete flush with surface, Stamped "PA-12A 1980". Located in Bucks County in the Bucks County Fraternal Order of Police Lodge property along the Delaware River. SE 2.8' from 36" Oak Tree, N. 33.0' from the cesspool, and NW 60.4' from the NE Corner of concrete wall extending north from lodge patic at river's edge.



UNITED STATES	DISK	STATION	PA 14 1	3 197	9,1987
PENNSYLVANIA	PA 14B 198	ò	ELEVATION	8.5	2/ 2
BUCKS COUNTY	CORPS OF ENGL	NEERS	Phila +	· Trenta	- Project
PHILA. TO BRISTOL	ESTABLISHED OY (Agency)		" ¿ o4	E	0.05.
LATITUDE	7		SATUM		

TO ENTER U.S. STEEL CO. PROPERTY, YOU MUST GET DERMISSION

AT MAIN GATE. YOU MUST ALSO SHOW PROPER I. D.

BENCH MARK is marked by a standard Coff Disk set flush in concrete and stamped "PA 14B 1980"

It is located in Burks Co. in the Fairless Hills Plant of the U.S. Steel Corp. at the downstream ontshore corner of Boat Slip at the Delaware River.

MOTE:

BENCH MARK is marked by the same Disk and concrete monament as was Benen mark

"PA 14B 1979". Monament and disk were relocated, within two feet of their original position, in 1984 after repairs to the bollard at corner of dock.

A new Elevation was established on disk from A UNITED 2 1972, in MAY 1987. The Elevation on A UNITED 2 1972 had been established from BENCH MARK PA 14A 1979 which has since been destroyed.

Fld. Bk 2-130

Boat

Slip

STEEL

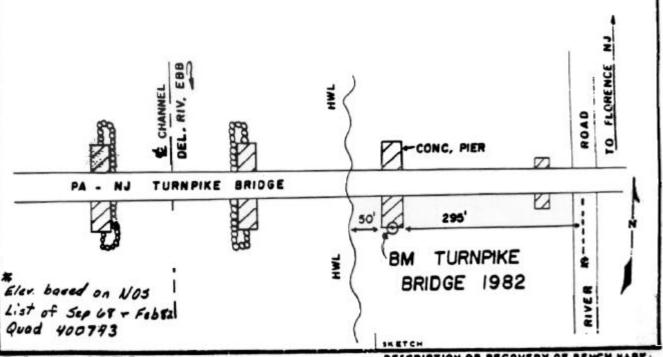
DELAWARE RIVER

45 ebb

USA		Standard Disk	TURNPIKE BRIDGE 1992
New Jersey		Turnpike Bridge 1932	ECEVATION .FT
Florence		Corps of Engineers ESTABLISHED BY (Agency)	Phila. to Trenton Project
LINE		Corps of Engineers	Corps of Engineers
CATITODE		LONGITUDE	81704
NORTHING	(FT) (N)	EASTING	GRID AND ZONE
NORTHING	(FT) (M)	EASTING	GRIO AND ZONE

Bench Mark TURNPIKE BRIDGE 1982 is located in Florence, NJ on the PA-NJ Turnpike Bridge over the Delaware River. The Bench Mark is marked by a Corps of Engineers disk set vertically 4.00 feet above ground in the south face of the second concrete pier west of River Road. It is 295 feet west of the centerline of River Road, 50 feet east of HWL of Delaware River, and 0.90 of a foot east of southwest corner of pier.

To reach bench mark from intersection of Broad St. and W. Front St. in Florence, NJ, proceed southwest along W. Front St. for 1.60 miles to PA-NJ Turnpike Bridge Crossing River Road (overhead) (W. Front St. becomes River Road in this vicinity). Then proceed west toward Delaware River - bench mark located in 2nd pier west of River Road.



DA . 304 1958

PLACES DA FORM 1988, 1 PES 67, DESCRIPTION OR RECOVERY OF BENCH MARK

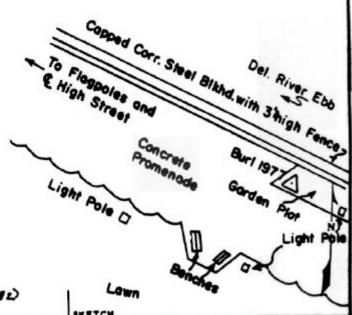
U. S. A.	Bronze Disk	STATION	1977			
New Jersey	STAMPING ON MARK BURL 77		Corps of Engineers		9.83 T	
LONGITUDE DATUM			PAIL	-Trenton Proj		
590 701.38 KM	285 890.97		e River 1939	STABLISHED BY (AGE		
HORTHINGHERSECKED (FT)	391 581.129	MAX NAD 83		DATE + MO	. 82	ORDER
TO OSTAIN	G.R.	ID AZIMUTH, ADD	• "	TO TH	€ GE00	ETIC AZIMUTA
TO OSTAIN	GR	ID AZ. (ADOI(SUB.)		TO TH	E GEODI	ETIC AZIMUTE
OBJECT AZ	(MUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTAN	CE FEET)	GRID	DISTANCE S) (FEET)
					- 8	
	+			-	100	
					122	

Station BURL 77 is located in the State of New Jersey, City of Burlington at the foot of High Street on the Delaware River.

A standard Corps of Engineers bronze disk threaded on a 4' long pipe, set flush with the ground approximately 185' upstream from the center of five flagpoles. (Center flagpole is on the centerline of High Street).

The station is near the southwest corner of the first garden plot upstream of the centerline of high street just inshore of the fence on the steel bulkhead; 66.88' east of the inshore upstream edge of the second light pole upstream of High Street; 55.13' NW of the downstream face of a light pole; 13.39' northeast of the outshore face of a lightpole; 5.99' southwest of the outer face of the steel bulkhead.

Recovered Jan 1981 by P.C. Moore Resevered May 82 by Gire.



* Levels from, N.J. Mon. 2865 (4Mar 82)

				8	067 8Z					
COUNTRY		TYPE OF MARK		STATION						
U.S.A.	Standard Disk VALVE 1959									
Roebling, N.J.	N.J. VALVE 1959 AGENCY (CAST IN MARKS) Corps of Engrs.		11. 2 9X							
40-07-19.35	676	74-46-41.72702 NAT 27 CALA.			76 74-46-41.72702 NAT 27		NAT 27			70m/300 Ect
605 408.12	(FT)	308 62 6. 91	XX	Delawar	ome e River 1939			Y (AGENCY)		
469 531.531	(FT) XXXX	414 424.434	(FT)	NAD 83	ONE (NJ 2900)	DATE		ORDER		
TO OBTAIN	100	GR	ID AZIMUT	H, ADD	• "	TOT	HE GEOD	ETIC AZIMUTE		
TO OSTAIN		GR	ID AZ. IADI	DIESUB.)	•	TO T	ME GEOD	ETIC AZIMUTE		
703180		(GEODETIC)(GRID)	BACK A	ZIMUTH	GEOD. DISTAL	CE FEET)	-	DISTANCE ISI (FEET)		
	\mp	• • •	Ė	•						
	\pm									

Note: The ele of this mark should be checked from time to time as there is evidence that it may be moving warred

The station was recovered in good condition. It is a bronze disk set flush in the top of large concrete block 3' above ground, over an intake that is outshore of pumphouse, along Delaware River on property of C.F.I. (formerly J. A. Roebling) Corp. in Roebling, N.J. It is approximately 800' downstream from the wharf on the property, and just upstream of the Roebling Range Lights.

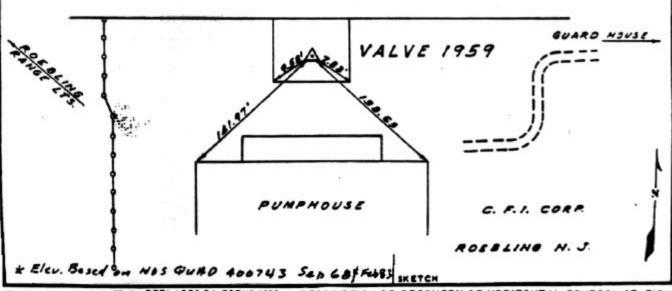
9.58' to L.I. corner

7.83' to U.I. corner

Recovered in April 1974 by C. McC. Description adequate.

Recovered Ja- 81 by D.C. Moore --

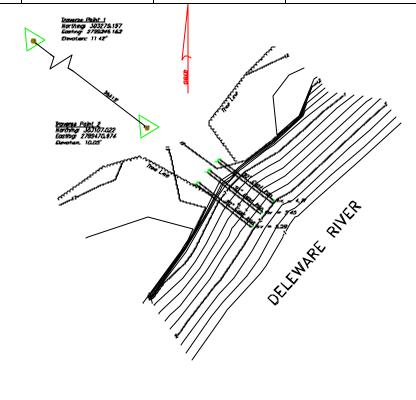
OSLAWARE RIVER



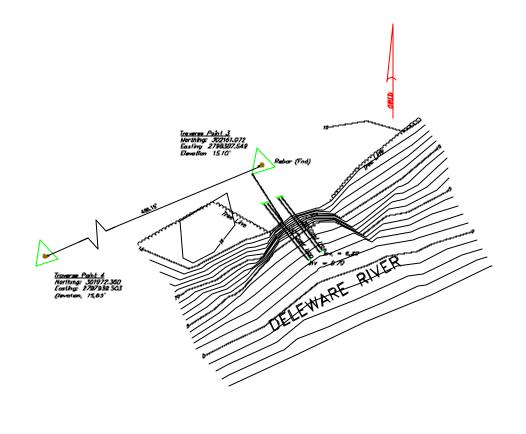
USA LOCALITY PENNSYLVANIA	BERNSTEN MONUMENT		ON		
PENNSYLVANIA		TR-1			
	STAMPING ON MARK		CY (CAST IN MARKS)	ELEVAT	
	CORPS OF ENGINEERS- I			11.42 F	
LATITUDE	LONGITUDE	DATUN		DATUM	
40°-07′-38.9823″N	74°-46′-42.9937″W	NAD 8		NAVD 8	
(NORTHING)	(EASTING)		AND ZONE		ISHED BY (AGENCY)
303279.157 FT	2799246.162 FT		NND ZONE		/ ASSOCIATES, INC.
(NORTHING) (FT)	(EASTING)		AND ZONE	DATE	ORDER
(M)		(M)	0 1 11	7/24/00	
TO OBTAIN		RID AZIMUTH, ADD	0 1 11	TO THE	GEODETIC AZIMUTH
TO OBTAIN	ZIMUTH OR DIRECTION	RID AZ. (ADD) (SUB)	- ' "	10 THE	GEODETIC AZIMUTH
OBJECT	(GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTAI (METERS)	NCE (FEET)	GRID DISTANCE (METERS) (FEET)
	Principal Politics Andrews Politics Andr		SELLINARY CANTER		

SKETCH

COUNTRY				STATION						
USA		BERNSTEN MONUMENT			TR-2					
LOCALITY		STAMPING ON MARK			ST IN MARKS)		ELEV	ELEVATION		
PENNSYLVANIA		CORPS OF ENGINEERS				10.0	5 FT			
LATITUDE		LONGITUDE		DATUM			DAT	JM		
40°-07′-37.2074″N		74°-46′-40.1756″W		NAD 83			NAVI	D 88		
(NORTHING)		(EASTING)		GRID AND ZO	ONE		ESTA	ABLISHED BY	(AGENCY)	
303107.022 FT		2799470.974 FT		PA-SOUTH 3702		RETTEW ASSOCIATES, IN		TES, INC.		
(NORTHING)	<u>(FT)</u>	(EASTING)	<u>(FT)</u>	GRID AND ZONE		DAT	E	ORDER		
	(M)		(M)				7/24	/00	3 rd.	
TO OBTAIN		(GRID AZIMUTH, A	ADD	0 1	"	TO T	HE GEODETIC	CAZIMUTH	
TO OBTAIN		(GRID AZ. (ADD) ((SUB)	0 1		TO T	HE GEODETIC	CAZIMUTH	
OBJECT	AZ	ZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)		ZIMUTH	GEOD DIS (METERS)		EET)	GRID I (METERS)	DISTANCE) (FEET)	



COUNTRY					STATION TR-3					
USA		DERIVOTEN MONOMENT	114-5							
LOCALITY		STAMPING ON MARK	AGENCY (CA	ST IN MARKS)		ELEV	ELEVATION			
PENNSYLVANIA		CORPS OF ENGINEERS-				15.1	0 FT			
LATITUDE		LONGITUDE		DATUM			DATU	JM		
40°-07′-28.2245″N		74°-46′-54.5249″W		NAD 83			NAVI	S8 C		
(NORTHING)		(EASTING)		GRID AND ZO	NE		ESTA	BLISHED BY	(AGENCY)	
302161.072 FT		2798387.549 FT		PA-SOUTH 3702		RETTEW ASSOCIATION		ATES, INC.		
(NORTHING)	<u>(FT)</u>	(EASTING)	<u>(FT)</u>	GRID AND ZONE		DATE		ORDER		
	(M)		(M)				7/24	7/24/00 3 rd.		
TO OBTAIN		G	RID AZIMUTH, A	ADD	0 1		TO T	HE GEODETI	C AZIMUTH	
TO OBTAIN		G	RID AZ. (ADD) ((SUB)	0 1		то т	HE GEODETI	C AZIMUTH	
OBJECT	AZ	ZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) "	-	ZIMUTH	GEOD DIST (METERS)		EET)	GRID (METERS	DISTANCE) (FEET)	

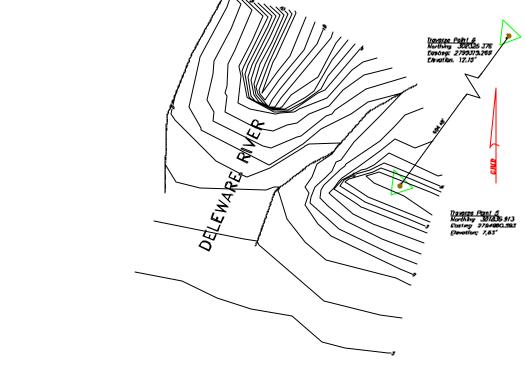


SKET¢H

COUNTRY USA		TYPE OF MARK BERNSTEN MONUMENT		STATION TR-4				
					ST IN MARKS)	EL EV	ATION	
Locality Pennsylvania		STAMPING ON MARK CORPS OF ENGINEERS-	IIS ADMV	AGENCY (CA	(CANAINI NI 1C	15.6		
			U.S. ARIVIT	DATUM				
_ATITUDE 40°-07'-26.5092"N		LONGITUDE		DATUM		DATU		
		74°-47′-00.3711″W		NAD 83	NIC	NAVI		DV (ACENOV)
(NORTHING)		(EASTING)		GRID AND ZO		ESTABLISHED E		
301972.350 FT		2797939.503 FT	(\)	PA-SOUTH 3				CIATES, INC.
(NORTHING)	<u>(FT)</u>	(EASTING)	<u>(FT)</u>	GRID AND ZO	DNE	DATE		ORDER
	(M)		(M)			7/24		3 rd.
TO OBTAIN			RID AZIMUTH,		0 I II			TIC AZIMUTH
TO OBTAIN		Gl	RID AZ. (ADD)	(SUB)	0 I II	TO T	HE GEODE	TIC AZIMUTH
OBJECT	A	ZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) " "		AZIMUTH	GEOD DISTANC (METERS) (F	E EET)	GR (METE	ID DISTANCE (RS) (FEET
	Traver me Pal Northing: 32 Earthy: 27 Generation, 7:	18-15 16-17-18-00 17-18-18-00 17-18-18-18-18-18-18-18-18-18-18-18-18-18-	Pobl 3 9 50206.072 279397549 n 1510	Rebor (Find)	AL RIVER			

SKETCH

COUNTRY USA		TYPE OF MARK BERNSTEN MONUMENT		STATION TR-5				
LOCALITY		STAMPING ON MARK	STAMPING ON MARK A		ST IN MARKS)	ELEV	ATION	(FT)
PENNSYLVANIA		CORPS OF ENGINEERS-	U.S. ARMY			7.65		
LATITUDE		LONGITUDE	LONGITUDE D			DATU	М	
40°-07′-26.1486″N		74°-47′-38.7567″W		NAD 83				
(NORTHING)		(EASTING)		GRID AND ZO	DNE	ESTA	BLISHED BY	(AGENCY)
301835.913 FT.		2794960.593 FT.		PA-SOUTH 3	702	RETTI	EW ASSOCI	ATES, INC.
(NORTHING)	<u>(FT)</u>	(EASTING)	<u>(FT)</u>	GRID AND ZO	DNE	DATE		ORDER
	(M)		(M)			7/24/	00	3 rd.
TO OBTAIN		G	RID AZIMUTH, A	ADD	o 1 11	TO TI	HE GEODETI	C AZIMUTH
TO OBTAIN		G	RID AZ. (ADD)	(SUB)	0 1 11	TO TI	HE GEODETI	C AZIMUTH
OBJECT	AZ	ZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK A	AZIMUTH	GEOD DISTANC (METERS) (F	E EET)	GRID (METERS	DISTANCE S) (FEET)
		0 1 11	0	1 11	, ,	Í	`	, , , , , , , , , , , , , , , , , , ,
		<i>t</i> \						
					Traverse Pohi 6 Northing 302125 176 Environ 2793173.209 Environ 12,13			



CCALITY COCALITY STAMPING ON MARK CORPS OF ENGINEERS- U.S. ARMY ATITUDE LONGITUDE L	NTRY	TYPE OF MARK BERNSTEN MONUMENT		STATION TR-6				
ATITUDE IO*-07'-30.8656"N 74*-47'-33.9825"W NAD 83 NAVD 88 IORTHING) (EASTING) (EASTING) (EASTING) (EASTING) (IM) (IEASTING) (IM) (IEASTING) (IM) (IEASTING) (STAMPING ON MARK						
10°-07'-30.8656"N								
IORTHING) 02325.376 FT 02395.376 FT 02395.376 FT 02795315.269 FT 02851NG) (FT) (M) (M) (EASTING) (FT) (M) (EASTING) (FT) (M) (GASTING) (FT) (M) (M) (FT) (M) (M) (GRID AZIMUTH, ADD (CONTINUE) (GRID AZIMUTH, ADD (CONTI								
DO OBTAIN GRID AZIMUTH, ADD TO THE GEODETIC OBJECT AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) O MAGNETIC) O MAGN					NIE.			A CENOVA
IORTHING) (FT) (M) (EASTING) (M) (FT) (M) (GRID AZIMUTH, ADD (TO THE GEODETIC O OBTAIN (GEODETIC) (GEODETIC) (GEODETIC) (GEODETIC) (MAGNETIC) (MAGNETIC								
(M) (M) (M) (M) (M) (M) (M) (M)								ORDER
O OBTAIN GRID AZIMUTH, ADD O OBTAIN GRID AZ. (ADD) (SUB) O OBTAIN OBJECT AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) MAGNETIC) BACK AZIMUTH GEOD DISTANCE (METERS) (FEET) (METERS) Transpare Part 8 Society 2793/73/89 Zéverillen, 12:15	THING)			GRID AND ZO	INE			3 rd.
O OBTAIN GRID AZ. (ADD) (SUB) AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) BACK AZIMUTH GEOD DISTANCE (METERS) (METERS) (METERS) Reverse Part 8 R	IRT A INI	· ·		חח	0 1 11			
OBJECT AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC) (MAGNETIC) BACK AZIMUTH GEOD DISTANCE (METERS) (METERS) (FEET) Itanges Part 8 Red Sign 2 Red Sig					o 1 11			
OBJECT (GEODETIC) (GRID) (MAGNETIC) OBJECT (GEODETIC) (GRID) (MAGNETIC) OBJECT (GEODETIC) (GRID) (METERS) OBJECT (GEODETIC) (GRID) (METERS) OBJECT (GEODETIC) (GRID) (METERS) OBJECT (METERS	.517(114			.05)		10 1	THE GEODETIC	7 EIIVIOTTI
Tonesce Pabl 8 Northing 279313,768 Checkbox, 12,15	OBJECT		BACK AZ	'IMUTH	GEOD DISTAN	ICE	GRID E	ISTANCE
Tenerge Polit 6 Northing 178205 TR Tenerge 2799373299 The serlion, 12.15			0 1		(METERS)	(FEET)	(METERS)	(FEET)
			<u> </u>					-
		DELEWARE			Traverse Bani Northing 3012 Gusting 3724 Elevation, 7,6:	35 9/3 36 9/3		

SKETCH

Country USA	Std. Bronze Disk	Penn Salt T-1 1996
Pennsylvania	Penn Salt T-1 1996	12.10
Municipality Cornwell, Heights	Agency USACE	Project Project
PID PT0019	Established by USACE	^{Order} 3 rd.
Latitude	Longitude	NAVD 88
Northing	Easting	Grid and Zone

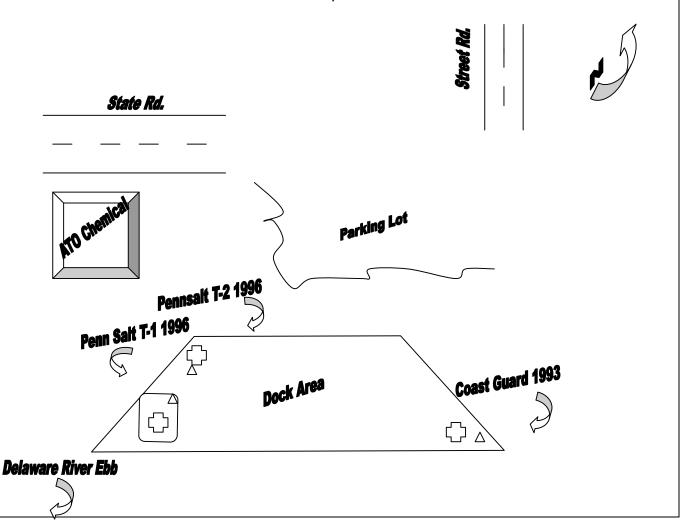
Station is located on the property of the ATO Chemical Company in Cornwell, Heights Pa. formally known as the Pennwalt Chemical Company at the same address.

To reach station from intersection of Street Rd. and State Rd. travel south on State rd. appox. 2 miles to the ATO Chemical Co. on the left hand side of the road. Station is located at the Dock Area, along the bulkhead on top of an 8x8 concrete slab used to support a Ballard.

Reference: Mon is appox. 150' South of station Coast Guard Pennsalt 1993 at the

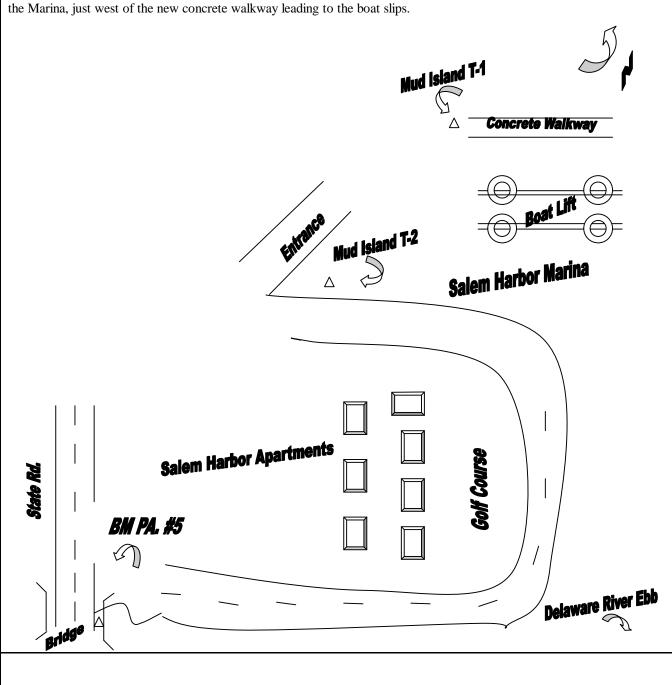
Reference: Mon is appox. 150' South of station Coast Guard Pennsalt 1993 at the Opposite end of the bulkhead.

Mon is 3.45' North of Ballard on top of bulkhead.



_{country} USA	Type of Mark Std. Bronze Disk	Station Mud Island T-1 1998
Pennsylvania	Stamp Mud Island T-1 1998	Elevation 14.74
Municipality	Agency USACE	Project Project
PID PT0016	Established by USACE	order 3 rd.
Latitude	Longitude	Datum NAVD 88
Northing	Easting	Grid and Zone

Station is located on the Property of the Salem Harbor Marina, to reach station from the intersection of State Rd. and Linden ave. Travel 0.9 miles North on State Rd. to the entrance of Salem Harbor Apartments. Turn right and go 0.6 miles to the entrance of Salem Harbor Marina. Station Mud Island T-1 1998 is located in the north east corner of the Marina, just west of the new concrete walkway leading to the boat slips.

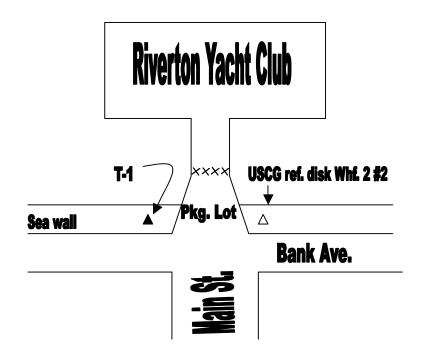


Country USA	Std. Bronze Disk	Riverton Whf. 2 #2
New Jersey	USCG ref. Whf. 2 #2	Elevation 9.13
Municipality Riverton	Agency USACE	Project Project
PId PT0012	Established by USACE	order 3 rd.
Latitude	Longitude	Datum
Northing	Easting	Grid and Zone

Station is located in Riverton NJ at the site of the Riverton Yacht Club at the intersection of Main and Bank street. USC&G Ref. Disk Riverton Whf. 2 #2 is set ontop of sea wall at the upstream end of the Riverton Yacht Club. Monument is in vicinity of a 0.30x0.30x0.10 concrete block used for a War Memorial. A ships anchor and stone plaque set atop.

POC: @ Riverton Yacht Club is BoB Bush

856-829-8524 610-941-5345



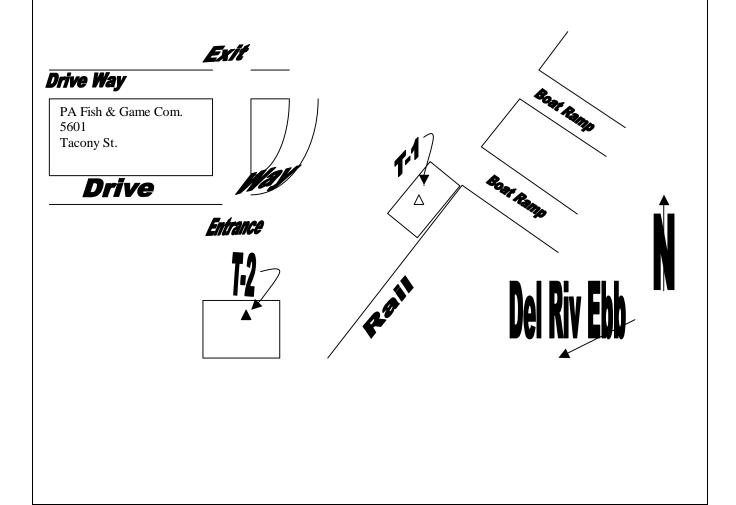


Country USA	Std. Bronze Disk	Rope T-1 1996
Pennsylvania	Rope T-1 1996	Elevation 11.15
Municipality Philadelphia	Agency USACE	Project Project
PId PT0009	Established by	Order 3 rd.
Latitude	Longitude	Datum
Northing	Easting	Grid and Zone

Station is located on the property of the PA fish and game commission. Located on State Rd. and Tacony St., adjacent to the old Frankfort arsenal, set in a concrete pad at the sea wall. Approx 100' south of boat ramp.

Reference

- 1. Mon. is 5.2' NW of seawall
- 2. mon. is 3.1' N of lower man hole ring
- 3. mon. is 2.5' S of upper man hole ring
- 4. mon. is 1.2' S of PK nail in same concrete pad.

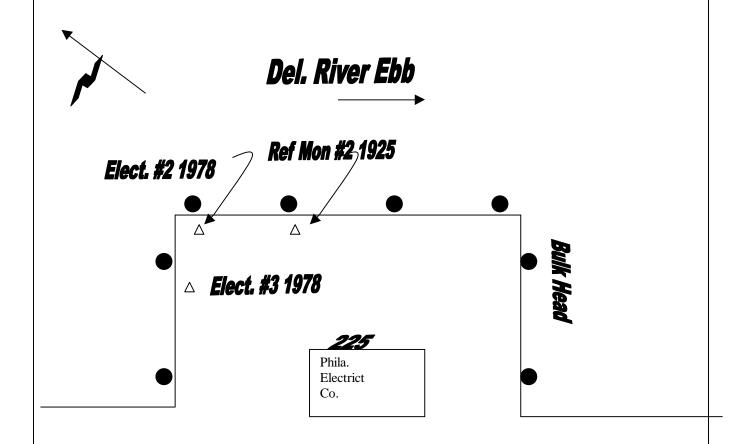


Country USA	Type of Mark Std. Bronze Disk	Ref. Mon. #2 1925
State Pennsylvania	Ref. Mon. # 2 1925	10.25
Municipality Philadelphia	Agency NGS	Project
PId PT0004	Established by NGS	Order 3 rd.
Latitude	Longitude	Datum
Northing	Easting	Grid and Zone

Station is located on the property of the Philadelphia Electric Co. generating station Bldg. 225 at the intersection of Delaware Ave. and Lewis St. To reach station, travel 95 North, exit at Allegheny Ave. Turn right and go 0.5 miles to the intersection of Allegheny Ave. and Delaware Ave. Turn left and travel 1.6 miles to main gate at Phila. Elect. Generating Station.

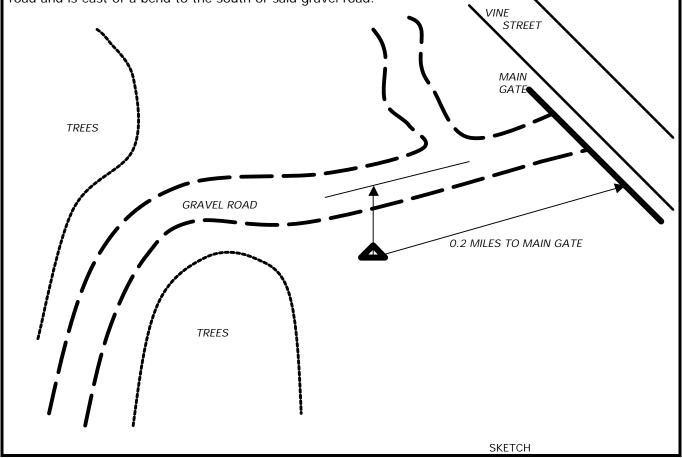
Reference

- 1. Mon. is approx 10' S of Electric #2 1978
- 2. Mon. is approx 10' SE of Electric #3 1978



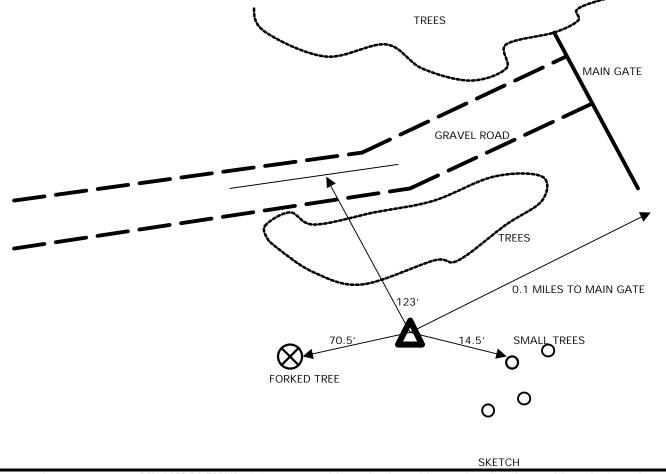
COUNTRY		TYPE OF MARK		STATION					
USA		Breakaway w/ a	lum. disk	HI 2					
LOCALITY		STAMPING ON MARK		AGENCY (CA	ST IN MARKS)		ELEV	ATION	(FT)
HAWK ISLAND, N.J.		HI 2		USACE			18.0	03	
LATITUDE		LONGITUDE		DATUM			DATL	JM	
N40 02′47.30260″		W74 57′58.12	156″	NAD83 (*	1986)		NA	88 VC	
(NORTHING) (F	FT)	(EASTING)	<u>(FT)</u>	GRID AND ZO	ONE		ESTA	BLISHED BY	(AGENCY)
442184.56		361629.83		NEW JER	SEY 2900		WO	OLPERT	LLP
(NORTHING) (F	FT)	(EASTING)	<u>(FT)</u>	GRID AND ZO	ONE		DATE		ORDER
1)	M)		(M)				11-6	6-98	GPS -
									3RD
TO OBTAIN		G	GRID AZIMUTH,	ADD	0 1		ТО	THE GEODE	TIC AZIMUTH
TO OBTAIN		G	GRID AZ. (ADD)	(SUB)	0 1	"	TO	THE GEODE	TIC AZIMUTH
OBJECT		MUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK A	ZIMUTH	GEOD DIS (METERS)		EET)	GRID (METERS	DISTANCE) (FEET)
-		0 1 11	0			, and the second	, and the second	•	

HI 2 is located + /- 0.2 miles west of the main gate to Hawk Island which is located on the west end of Vine Street in the town of Delanco, New Jersey. It is a breakaway mark with a Corps of Engineers aluminum disk set in concrete and is flush with the ground. It is 24feet south of the centerline of a gravel road and is east of a bend to the south of said gravel road.



COUNTRY		TYPE OF MARK		STATION				
USA		Breakaway w/ a	lum. disk	HI 1				
LOCALITY		STAMPING ON MARK		AGENCY (CA	ST IN MARKS)	ELEV	'ATION	(FT)
HAWK ISLAND, N.J.		HI 1		USACE		21.	17	
LATITUDE		LONGITUDE		DATUM		DAT	JM	
N40 02′47.43110″		W74 57′52.85	691″	NAD83 (*	1986)	NA	DV 88	
(NORTHING)	(FT)	(EASTING)	<u>(FT)</u>	GRID AND ZO	ONE	ESTA	ABLISHED BY	(AGENCY)
442195.43		362039.29	362039.29 NEW JER		RSEY 2900 W		WOOLPERT LLP	
(NORTHING)	(FT)	(EASTING) (FT) GRID AND ZONE		DATI		ORDER		
	(M)		(M)			11-	6-98	GPS –
								3RD
TO OBTAIN		G	GRID AZIMUTH,	ADD	0 1 11	TC	THE GEODI	ETIC AZIMUTH
TO OBTAIN		G	GRID AZ. (ADD)	(SUB)	0 1 11	TC	THE GEODI	ETIC AZIMUTH
OBJECT		IMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK A	ZIMUTH	GEOD DISTAN (METERS)	CE FEET)	GRID (METERS	DISTANCE () (FEET)
		0 1 11	0					

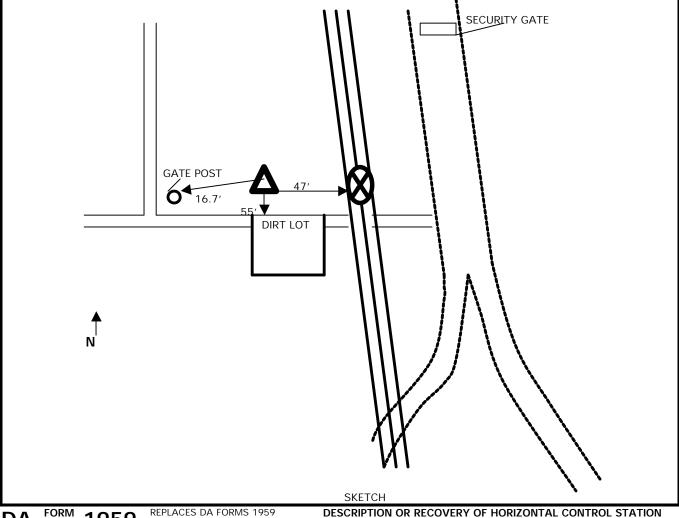
HI 1 is located + /- 0.1 miles west of the main gate to Hawk Island which is located on the west end of Vine Street in the town of Delanco, New Jersey. It is a breakaway mark with a Corps of Engineers aluminum disk set in concrete and is flush with the ground. It is 123 feet south of the centerline of a gravel road, 70.5 feet east of a forked tree, and is 14.5 feet west of a small tree.



NADV 88					
Y (AGENCY)					
LLP					
ORDER					
GPS – 3RD					
TO OBTAIN GRID AZIMUTH, ADD ° ' " TO THE GEODETIC AZIMUTH					
DETIC AZIMUTH					

10 05171111		OND ME. (MDD) (OOD)	10	THE GEODETIO AZIMOTH
OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
	0 1 11	0 1 11		

BI 2 (P2) is located southwest of the guard house for the U.S. Steel plant just south of Biles Island. The station is + /- .8 miles south of Tybron Road along S. Pennsylvania Avenue. The mark is a 30 inch iron pin with an aluminum cap is flush with the ground. It is 47 feet west of a transmission line tower, 55 feet north of the north edge of a dirt parking lot, and is 16.7 feet northeast of a gate post.



			LY MIKE	00	
USA	TYPE OF MARK	STATION	or	-	
	Standard Disk	AL	85		
PROVINCE OR STATE	STAMPING ON MARK	40200	ELEVATION	(FT)	
PA	AL BM 85		13.0	oz 👼	
MUNICIPALITY	AGENCY (Cast in Mark)	TEST OF THE	DATUM		
Port Richmond Sec of Phila	CE		Phila to Trenton Pr	roject	
LINE	CE -		Coffe Feb 85	ORDER	
LATITUDE	LONGITUDE		DAYUM		
NORTHING (FT)	EASTING		GRID AND ZONE		
NORTHING (FT)	EASTING CONTRACTOR OF THE PARTY		GRID AND ZONE		

Bench mark AL 85 is located in Port Richmond section of Philadelphia, PA., at intersection of Allgeheny Avenue and Delaware Avenue. The bench mark is marked by a Corps of Engineers disk set at the southwest corner of base of flag pole at entrance to Casimir Pulaski Pier Park.

To reach bench mark from intersection of Allegheny Avenue and Richmond Street, proceed east along Allegheny Avenue 0.4 of a mile to intersection of Allegheny Avenue and Delaware Avenue. Bench mark is located at entrance of Casimir Pulaski Pier Park.

* NGVD is El Z.401 from PLT Pris. Doton

NAMALCO
TERMINAL

ENTRANCE

ENTRANCE

TOPARK

PELAWARE AVE

AVE

DELAWARE AVE

AVE

DELAWARE AVE

AVE

DELAWARE AVE

AVE

DELAWARE AVE

DELAWA

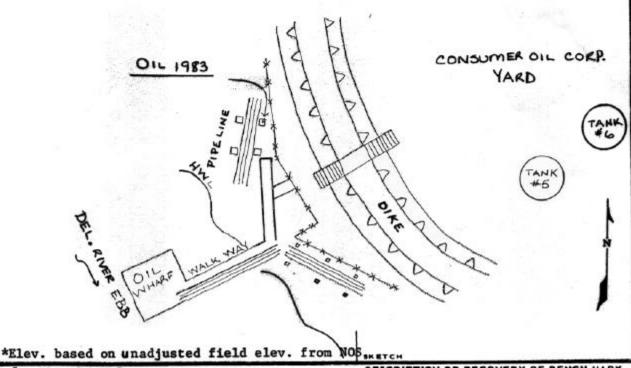
DA . FORM. 1958

LACES DA FORM 1988, 1 FEB 87, DESCRIPTION OR RECOVERY OF BENCH MARK

USA	CUT	B.M.	OIL 1983	
PROVINCE OR STATE New Jersey	STAMPING ON MARK		13.15*	(FT)
Duck Island, NJ	AGENCY (Cost in Mark) DATUM Phila.		Phila. to Trenton Project	
LINE	ESTABLISHED SY (Agency)		Corps of Engineers	ORDER
LATITUDE	LONGITUDE		BATUM	
NORTHING (FT)	EASTING		GRID AND ZONE	
NORTHING (FT)	EASTING		GRID AND ZONE	

Bench Mark "OIL 1983" is south of Trenton, NJ on Duck Island on the east side of the Delaware River. It is on the property of Consumer Oil Corp., approximately 50 feet upstream of dock, 20 feet upstream of upstream end of walkway and on line with the centerline of walkway. It is marked by a set 3.4 feet above ground in the top of upstream inshore corner of a 12" X 12" concrete post, which is inshore post of the second pair of pipeline support posts upstream from dock. The post is marked by orange paint.

CAUTION: This bench mark is NOT a painted bench mark on a post on the downstream side of dock.

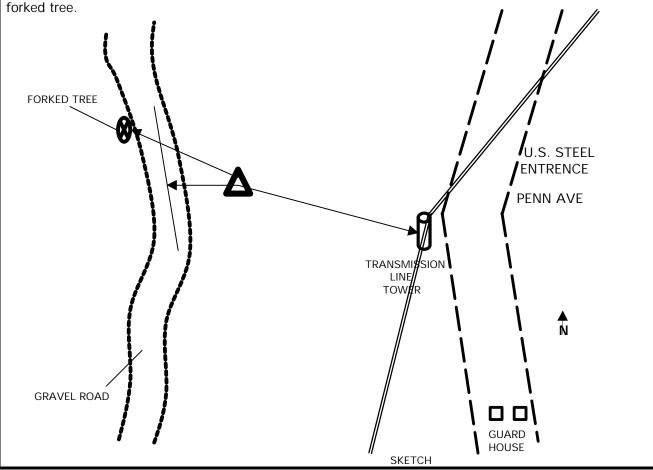


DA . FORM. 1958

REPLACES DA FORM 1966, 1 FEB 67, DESCRIPTION OR RECOVERY OF BENCH MAR

COUNTRY		TYPE OF MARK		STATION				
USA		Breakaway w/ al	lum. disk	BI 1 (P1)				
LOCALITY		STAMPING ON MARK		AGENCY (CA	ST IN MARKS)	ELEV	ATION	
BILES ISLAND PA.		BI 1		USACE		20.	00	
LATITUDE		LONGITUDE		DATUM		DATU	JM	
N40 10′33.16629″		W74 45′27.305	556"	NAD83 (*	1986)	NAI	88 VC	
(NORTHING)	(FT)	(EASTING)	<u>(FT)</u>	GRID AND ZO	ONE	ESTA	BLISHED B	Y (AGENCY)
489084.60		420151.91		NEW JER	SEY 2900	WO	OLPERT	LLP
(NORTHING)	(FT)	(EASTING)	<u>(FT)</u>	GRID AND ZO	ONE	DATE		ORDER
	(M)		(M)			11-	8-98	GPS –
								3RD
TO OBTAIN		G	RID AZIMUTH,	ADD	0 1 11	TO	THE GEOD	ETIC AZIMUTH
TO OBTAIN		G	RID AZ. (ADD)	(SUB)	0 1 11	TO	THE GEOD	DETIC AZIMUTH
OBJECT		IMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK A	ZIMUTH	GEOD DISTANO (METERS) (I	CE FEET)	GRID (METER:	DISTANCE S) (FEET)
		0 1 11	0	. "				

Bl 1 (P1) is located northwest of the guard house for the U.S. Steel plant just south of Biles Island. The station is +/- .3 miles south of Tybron Road along S. Pennsylvania Avenue. The mark is a breakaway mark with a Corps of Engineers aluminum disk and is flush with the ground. It is 158.5 feet northwest of a transmission line tower, 40.6 feet east of the centerline of a gravel road, and is 78 feet southeast of a



OUNTRY	TYPE OF MARK		STATION				
USA	center pun	ich	**************************************	Alun Pil	ee		
LOCALITY	STAMPING ON MARK		AGENCY ICA	ST IN MARKS	ELEV		(FT)
71					6	.575	(44)
Palmyra, NJ	LONGITUDE		DATUM		DATU	1	
LATITUDE	CONGITODE				M	NDO	8
			-		////	1100	ACENCY
(HORTHING)(BACTES) (F)	1		GRID AND Z		I. C.ST. WE	CIDALD 84	AUENCT)
427971.802					-		
(HORTHING)(EASTING) (F	T) (EASTING)(NORTHING)	(FT)	GRID AND Z	ONE	DATE		RDER
(*	n.	(M)		and the same			SPS.
TO OBTAIN		RID AZIMUT	H, ADD	•	" то т	HE GEODET	IC AZIMUT
TO OBTAIN		RID AZ. (AD		•	" TO T	HE GEODET	IC AZIMUTI
	AZIMUTH OR DIRECTION	200		GEOD. DIST	ANCE	GRID D	STANCE
OBJECT	(GEODETIC)(GRID)	BACK A	ZIMUTH	(METERS)	IFEET)	(METERS)	(FEET)
	(MAGNETIC)						
2		-	-		-	-	
7		11 11					
							12 100
. 171				A 1 1			
		4	10				05 18 10
Station is an	ginn Rd o	of in	a fie Id	behind He	Tac	ON 4 Pol	7410
Station is 278 Station is 16407	4ft SE of ly	ght pol	£ # 70	lested in	porti	ing Area	9. 2.
* * * * * * * * * * * * * * * * * * *	25 D N						
12 12 15			90				
26			== ""	. 1			
*** #*:		3720	200				
	V		200	9			
			28	1			12.5
	9 8		-	0-1	01-		7777
			12cony	Bridge	NT/3		
8				-		1 1	
		125.30			_		_
		_		,		5.00	-
							1
	10	/	110	interpre e			
		1	772	Olda	1	0.2	- 1 - 1
	3 2			0139	1		
		1		J			

		_		Light		*	
*			1	Not on the	10	9.00	1
	- P		_ /6	.61	-		-
	9		1	0.	STre	07	N
	G.	875			100		\neg
		78.7	open Cia	12			
	8	. 111	FIE	1-	Al.	M	4
	G	3		-	A Ri	re ·	
179	63	>	1		,		,
	£,		144	TCH			

COUNTRY	TYPE OF MARK		ISTATION:				
COUNTRY	10			0			
0)//	Capped Pipe		AGENCY ICA	ST IN AMY	ELEVA	TION	
Burlington N.J.	STAMPING ON MARK	es vetti M.A.	AGENCY ICA	SI IN MARKS		5.83	(FT)
DUCING TON, IV.U.	LONGITUDE		DATUM		DATUM	.00	(3)
LATITUDE	LONGITUDE			83			8
HORTHING)(EASTING)- (FT)	(EASTING)(NORTHING)	(FT)	GRID AND ZO		ESTAB	LISHED BY	AGENCY
454951, 252	394043.28	2.1	N.J.				***
NORTHING (EASTING) (FT)	(EASTING)(NORTHING)	(FT)			DATE	0	RDER
(M)		(M)		× 1100			
TO OBTAIN	GR	ID AZIMUT	H, ADD	6 , ,	TO T	HE GEODETH	CAZIMUT
O OBTAIN		ID AZ. (AD		•		HE GEODETI	
AZ	(MUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK A	ZIMUTH	GEOD DISTA	NCE (FEET)	GRID DIS	TANCE (FEET)
	6 7 7	• .					
5. 2					8 521		• .
	3		ive :				9
	٠		A	N sy SS e	3		
7 ,	711 - P	2 /	' 12	177/=	60.7	p 1)
10 reach	Station Ra	ng to	OH NZ	13 (1000	on y	orioge.	/,
	PL 13- 1	TL	ser L	RTTZ	رمرم	2,4	, .
roceed Northon	WE 120 THON	- NICE		2	116	150	*
approx. 10,5 M	les to inters	rectio.	of o	KT 130 & H	igh J	St. 12	
15 / 1	1601 -	. ,	74%	11.4	5	/	0,1 8
Burlington. Tors	lett & pro	ceed	· / MILE	solin no		to .	*n 8
whereation with	Pear ST.	TUNN	nght	on Pearl	for	- 1 1	6
3 miles to city or	CR 1-1	21	1	544.	is 1	1241	~
3 Hiles to city of	מסש במוויוט	72 1	CHIP O	C. EL 2		17	5
ight side of rang	o destron	1 -	2.46	2 Lec. Tol		- 209 15	
1ch1 - 12 51/18	West of DW	COPNE	roth	bot Fee Co	Heat	in Ro	μ
54-1: in 47, 30ths	WOTNW	corke	r 05 0	out Fee Co	Hect	on Bon	10
tation is 10,0A,	N.ot (+) cut,	v Conci	rete on 1	North side of	1600	t rang	
		ſ	0.2	100		. /	
0.00	. 10	Carl		1025 1.000			8
	1	54	3	· Pole #6	7000		9
	1 1.	1.3		9 ,0,0	15		1
	1 1	4		Bath			
the second expression		STA	4	277		ton 1	1
	1 20	0 100	-	B R	1119	10	
	1 3 1.	C R	Rang	0	261,0	_ 1	
	1 (2)	1 THE		0	ונוני	Pamp	1
	1 6	232	1	L A	bat	`	On
¥	1 2 1	29	- 1	V		- 1	0
	/ 2.	8	1	ä		•	11
	/ / /	1	1	20			
	1 6		. 1				M
	/ 61		1				' A
8.86	/ 6/	1	I				1 1
8	1 3 1	100	20 0	10			1 [
	16	, [F	**	-			l N
	7 1	28 T		.e.:			l î
100				泉		1	
0 18	\ /						4
				* * * * * * * * * * * * * * * * * * *			•
							•
			SKE				

USA						
U3 M	TYPE OF MARK	STATION	0 1	,		
	VISC		roperty	_		
OCALITY	STAMPING ON MARK	AGENCY	CAST IN MARKS	ELEVA		(FT)
Palmura N.	T.			. 1 7	1.88	(46)
ATITUDE	LONGITUDE	DATUM		DATU		
	1	1//	1007	1 1	AVD 8	8
NORTHING)(BWSTTTG)	(FT) (EASTING)(NOCHEMENTS) (FT) GRID AND	ZONE	ESTAB	LISHED BY (A	GENCY)
			- 2000	1		
128062,782	10 340446.98		2900	PATE	108	DER
NORTHING)(EASTING)	(FT) (EASTING)(NORTHING) (FT) GRID AND	ZONE	DATE		00
	(M)	(M)			6	10
OOBTAIN		RID AZIMUTH, ADD	•	TO T	HE GEODETIC	AZIMUT
OOBTAIN		RID AZ. (ADD)(SUB.)	•	TOT	HE GEODETIC	AZIMUT
	AZIMUTH OR DIRECTION		GEOD. DIST	ANCE	GRID DIS	TANCE
OBJECT	(GEODETIC)(GRID)	BACK AZIMUTH	(METERS)	(FEET)	(METERS)	FEET
	(MAGNETIC)	• , •				
3 3 A		, ,	1.		<u> </u>	
	20 20 Miles					
**************************************			C · //	11.	1 10	
0 - 1 15 0	disc set in	concrete in	a tield s	behme	the	1
roper ig z	& Bridge Moins	6.13.10- 111	an Ha	500 4	e side o	£
Ta Polnur	2 Bridge Main	avence Bid	g, gay the	UUU IR	, 3,00	
acony .	WIT To	reach the		6 ,300	/	
RY 73 IN POIN	yra, No To	1 1 10	1000000	1		
. 40	2 / - //.	NO- LU IAE	101166 6 1	, -, -,	110120	wice
ESSE ON TELE	my Palnyra B.	il out the	ersely sid		TUNN	
area just p	ng single of Be whenever area	oths,	1111		į i	111
The state of the	where e area	and proceed	1 behind	7012	NENCO !	orag.
right ince			1 1 1	C: //		
10	1 4 4	10 - SMO// ST	ream to	-/0.	1.0	
					Oldy	
Station 13 500	15	wilt and #70	located in	-L.		1.00
dition 13 247.	78 Jt 300	you pak 10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Jan 11 m	, 2700	
behind Mainte	verce bldg.		. 1			
Demis		5 Hg	0.80			
		72000	Bridge h	477		
		18000	, riage "	- / 0		
					71	
		AL-COMOTON, —			-1	
		/ -				
		/ 1	4 4424			
		7		- 1		
		7 1	101 and	=		
		1 1	BILL	=		
			Mainter and Bldg	-		
		1	Bldg			
			Bldg			
		o de la constant de l				
		O Jones of the second of the s	Light Role	# 70 217		
		O 3 Rots	Light Role	# 70 217		·
		o o o o o o o o o o o o o o o o o o o		# 70 217		
		o mens	Light Role	# 70 217		
		o o o o o o o o o o o o o o o o o o o	Light Role	# 70 217		
		o o o o o o o o o o o o o o o o o o o	Light Role	# 70 217		

COUNTRY	TYPE OF MARK		STATION			
USA	PK NZil		/	ourt		
LOCALITY	STAMPING ON MARK			ST IN MARKS)	ELEVA	TION (FT)
Burling boy NJ			metero ti misso a a se		9	.071
LATITUDE	LONGITUDE		DATUM		DATUN	
LATITUDE	CONGITODE	**		~-	1	11/12/00
			MAD		1/1/	MV1/00
NORTHING)(BACTING) (FT)	(EASTING)(NOTTO)	(FT)	GRID AND ZO		ESTAB	LISHED BY (AGENCY)
454818.795	393857.87	74	NU.	2900		
NORTHING)(EASTING) (FT)		(FT)	GRID AND ZO	ONE	DATE	ORDER
(M)	1일 [12](14](14](1) : BONG - (20](1) : 10(1)(1)	(M)				
				•	70.7	HE GEODETIC AZIMUT
O OBTAIN		ID AZIMUT			77	
O OBTAIN		NID AZ. IAD	D)(SUB.)		10 1	HE GEODETIC AZIMUT
	(GEODETICHGRID)	BACK A	, MILTH	GEOD. DIST	***************************************	GRID DISTANCE
OBJECT	(MAGNETIC)		LIMOTA	(METERS)	(FEET)	(METERS) (FEET
	(MAGNETIC)		,, ,		THE ST	
			2			
		and the second second		- 1		
			and the second	1 1 1		
ar 1 St Town righ	+ and proceed	.3 M	/25 to 1	city of Bui	Ming t	en Public
Bost Ramp. State	in Court is is	PKW	oil loc	ated in 7	he co	exterot
basketball cours						
UZSKETON // COUPT	- Wille Jour	1 -100	, The	THE P	de	, ,
Station Court is	44.50 tt. West	t of E	est Das	Ketboll Net	SUPP	ort pole.
11 Couting	12,90 ft East	of Wes	t Ouskel	tboll Not	Frence	1-6
tation Court is 37	1.95 ft North o	f UNHO	Ked bol	+ BL 36.	- 6	Weds.
f baketball cour	+	9.0	1		1	
+ Daneteell Cour					0.490	
			\			
			1			
			1			1
	\	1	1			
	1	1	1	1	-	1
	\	1 1	1 6	1	Borl	ington
	1 6	1 5	-	J.	- 0	LIIC \
	1 %		l'a		PSI	Pans 0
	1 7	(Ronp		12-1	blic Rong of
	1	1	Kon P	-	1000	, 1
	1 3		6 3	1	11(6)	
	3	. 1	, 1			',
	+ . 5	1	0 F	1		- · ·
	18	1	0 /			3.
		1	<u> </u>			
	0	1 .	7 1	C3 6	3 6	3 0
	1 3	1 1	0 1	- C	- 4	17
	0	1 25.04	2.			desker
		1	1	اج	10250000	100
	\ /	M	1	_	A Court	L -
	\ /			10 0	- Cour L	1 1 1
						I I IN
			1	l		
			1	l		
			1	I	• Light	
			1	1		
				I		
				тсн		

CENTERLINE COORDINATES AND FLAIR DATA

(40' CHANNEL) DELAWARE RIVER PHILADELPHIA TO TRENTON NAD 83 - CENTERLINE COORDINATES RANGE HARBOR LATITUDEDEPARTURE STATION 0+000 416262.9687 325346.5655 TO AZIMUTH UP = 80°58'00.9" LENGTH = 4,274.7647'STATION 4+274.76 416934.1277 329568.3138 **RANGE** ${f LATITUDE}$ FISHER DEPARTURE **STATION** 4+274.76 416934.1277 329568.3138 TO AZIMUTH UP = $69^{\circ}42'14.7"$ LENGTH = 1,863.7761'**STATION** 6+138.54 417580.6136 331316.3748 RANGE DRAW LATITUDEDEPARTURE STATION 6+138.54 417580.6136 331316.3748 TO AZIMUTH UP = $41^{\circ}28'00.4"$ LENGTH = 4,512.8271'*STATION* 10+651.37 420962.2543 334304.7046 RANGE DELAIR LATITUDEDEPARTURE 10+651.37 STATION 420962.2543 334304.7046 AZIMUTH UP = 18°07'59.4" LENGTH = 5,965.6968 TOSTATION 16+617.06 426631.6695 336161.3869 RANGE BRIDESBURG ${f LATITUDE}$ DEPARTURE **STATION** 16+617.06 426631.6695 336161.3869 **AZIMUTH** UP = 38°53'24.7" **LENGTH** = 1,860.5370' TO**STATION** 18+477.60 428079.8196 337329.4876

LATITUDE

AZIMUTH UP = $61^{\circ}14'58.3"$ LENGTH = 6,399.6852'

431158.0435

DEPARTURE

337329.4876

342940.2369

STATION 18+477.60 428079.8196

FRANKFORD

24+877.29

RANGE

TO

STATION

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

		DELPHIA TO TRENTON CENTERLINE COORDINATES	
RANGE	TACONY	LATITUDE	DEPARTURE
STATION	24+877.29	431158.0435	342940.2369
TO	AZIMUTH $UP = 70°C$	01'59.6" <i>LENGT</i>	H = 7,120.7578
STATION	31+998.04	433589.6066	349632.9712
RANGE	TORRESDALE	LATITUDE	DEPARTURE
STATION	31+998.04	433589.6066	349632.9712
TO	AZIMUTH UP = 42°1	L7'54.8" LEN	GTH = 8,440.4502'
STATION	40+438.49	439832.5697	355313.3420
RANGE	MUD ISLAND	LATITUDE	DEPARTURE
STATION	40+438.49	439832.5697	355313.3420
TO	AZIMUTH $UP = 52°3$	37'37.2" LEN	GTH = 10,163.2553'
STATION	50+601.75	446001.6813	363390.0877
RANGE	ENTERPRISE	LATITUDE	DEPARTURE
STATION	50+601.75	446001.6813	363390.0877
TO	AZIMUTH UP = 61°2	27'08.3" LEN	GTH = 10,384.7743'
STATION	60+986.52	450964.4641	372512.2763
RANGE	BEVERLY	LATITUDE	DEPARTURE
STATION	60+986.52	450964.4641	372512.2763
TO	AZIMUTH UP = 91°3	32'58.7" <i>LEN</i>	GTH = 3,948.3383'
STATION	64+934.86	450857.6901	376459.1706
RANGE	EDGEWATER	LATITUDE	DEPARTURE
STATION	64+934.86	450857.6901	376459.1706
TO	AZIMUTH UP = 69°5	52'54.1" <i>LEN</i>	GTH = 8,328.2885!

384279.3035

DELAWARE RIVER

STATION 73+263.15 453722.2862

(40' Channel)

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

(40' Channel)

DELAWARE RIVER PHILADELPHIA TO TRENTON NAD 83 - CENTERLINE COORDINATES

RANGE	DEVLIN	LATITUDE	DEPARTURE
STATION	73+263.15	453722.2862	384279.3035
TO	AZIMUTH $UP = 78$	°17'08.2" LENG	GTH = 6,245.1882'
STATION	79+508.34	454990.2677	390394.4158
RANGE	<u>LEHIGH</u>	LATITUDE	DEPARTURE
STATION	79+508.34	454990.2677	390394.4158
TO	AZIMUTH $UP = 28$	°41'02.1" LI	ENGTH = 3,994.8264'
STATION	83+503.17	458494.8531	392311.8410
RANGE	CANAL	LATITUDE	DEPARTURE
STATION	83+503.17	458494.8531	392311.8410
TO	AZIMUTH UP = 47	°15'31.3" LI	ENGTH = 1,156.8215'
STATION	84+659.99	459279.9754	393161.4402
RANGE	BRISTOL	LATITUDE	DEPARTURE
STATION	84+659.99	459279.9754	393161.4402
TO	AZIMUTH $UP = 61$	°16'48.7" Li	ENGTH = 3,887.5315'
STATION	88+547.52	461148.0382	396570.7278
RANGE	KEYSTONE	LATITUDE	DEPARTURE
STATION	88+547.52	461148.0382	396570.7278
TO	AZIMUTH UP = 39	°10'41.7"	ENGTH = 2,550.2852'
STATION	91+097.80	463124.9792	398181.8327
RANGE	LANDRETH	LATITUDE	DEPARTURE
STATION	91+097.80	463124.9792	398181.8327
TO	AZIMUTH UP = 18	°11'39.9" Li	ENGTH = 7,373.4414!
STATION	98±471 25	470129.7673	400484 1319

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

Printed with an evaluation copy of Dr. Form

(40' Channel)

DELAWARE RIVER PHILADELPHIA TO TRENTON NAD 83 - CENTERLINE COORDINATES

RANGE	RIVERVIEW	LATITUDE	DEPARTURE
STATION	98+471.25	470129.7673	400484.1319
TO	AZIMUTH UP	= 41°27'11.3"	ENGTH = 1,214.3117'
STATION	99+685.56	471039.8909	401288.0149
RANGE	FOUNDRY	LATITUDE	DEPARTURE
STATION	99+685.56	471039.8909	401288.0149
TO	AZIMUTH UP	= 62°35'46.0"	LENGTH = 1,352.6474'
STATION	101+038.20	471662.4605	402488.8738
RANGE	CHURCH	LATITUDE	DEPARTURE
STATION	101+038.20	471662.4605	402488.8738
TO	AZIMUTH UP	= 85°27'51.2"	LENGTH = 1,139.7129'
STATION	102+177.92	471752.5911	403625.0173
RANGE	FLORENCE	LATITUDE	DEPARTURE
STATION	102+177.9175	471752.5911	403625.0173
TO	AZIMUTH UP	= 111°19'15.6"	LENGTH = 8,166.6134'
STATION	110+344.53	468783.2710	411232.6919
RANGE	ROEBLING	LATITUDE	DEPARTURE
STATION	110+344.5309	468783.2710	411232.6919
TO	AZIMUTH UP	= 79°50'19.7"	LENGTH = 2,086.4159'
STATION	112+430.95	469151.3530	413286.3829
RANGE	KINKORA	LATITUDE	DEPARTURE
STATION	112+430.95	469151.3530	413286.3829
TO	AZIMUTH UP =	= 50°20'03.2"	LENGTH = 6,969.9059
STATION	119+400.85	473600.2994	418651.6847

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

(40 Chamer)		PHILADELPHIA TO TRENTON 83 - CENTERLINE COORDINATES	
RANGE	<u>PENN</u>	LATITUDE	DEPARTURE
STATION	119+400.85	473600.2994	418651.6847
TO	AZIMUTH UP	= 70°25'17.6"	2,106.3409'
STATION	121+507.19	474306.1284	420636.2445
RANGE	NEWBOLD	LATITUDE	DEPARTURE
STATION	121+507.19	474306.1284	420636.2445
TO	AZIMUTH UP	= 95°23'24.1"	= 3,169.5700'
STATION	124+676.76	474008.3947 End of 40' Project Depth	423791.7998
RANGE		LATITUDE	DEPARTURE
STATION			
TO	AZIMUTH UP	= LENGTH	=
STATION			
RANGE		LATITUDE	DEPARTURE
STATION			
TO	AZIMUTH UP	= LENGTH	=
STATION			
RANGE		LATITUDE	DEPARTURE
STATION			
TO	AZIMUTH UP	= LENGTH	=
STATION			
RANGE		LATITUDE	DEPARTURE
STATION			
TO	AZIMUTH UP	= LENGTH	=
STATION			

DELAWARE RIVER

(40' Channel)

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

(25'	Channel)

DELAWARE RIVER PHILADELPHIA TO TRENTON NAD 83 - CENTERLINE COORDINATES

RANGE	BLAKE	LATITUDE	DEPARTURE
STATION	124+676.76	474008.3947	423791.7998
TO	AZIMUTH UP = 74°	15'41.4" L	ENGTH = 1,016.0274'
STATION	125+692.79	474283.9893	424769.7360
RANGE	WHITEHILL	LATITUDE	DEPARTURE
STATION	125+692.79	474283.9893	424769.7360
TO	AZIMUTH $UP = 49°5$	58'57.8"	LENGTH = 6,258.4509'
STATION	131+951.24	478308.2900	429562.7738
RANGE	RARITAN	LATITUDE	DEPARTURE
STATION	131+951.24	478308.2900	429562.7738
TO	AZIMUTH $UP = 23°0$	01'57.3"	LENGTH = 1,489.5221
STATION	133+440.76	479679.0711	430145.5563
RANGE	BORDENTOWN	LATITUDE	DEPARTURE
STATION	133+440.76	479679.0711	430145.5563
TO	AZIMUTH $UP = 3599$	°00'35.1"	LENGTH = 3,941.1088'
STATION	137+381.87	483619.5913	430077.4447
RANGE	DUCK ISLAND	LATITUDE	DEPARTURE
STATION	137+381.87	483619.5913	430077.4447
TO	AZIMUTH $UP = 324$	°39'07.6"	LENGTH = 7,628.0769'
STATION	145+009.95	489841.4656	425664.3010
RANGE	PERRIWIG	LATITUDE	DEPARTURE
STATION	145+009.95	489841.4656	425664.3010
TO	AZIMUTH UP = 307	°28'45.3"	LENGTH = 1,452.3166!
STATION	146+462.27	490725.1629	424511.7809

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

25 Channel	PHILADEL	AWARE RIVER PHIA TO TRENTON TERLINE COORDIN	
RANGE	BILES ISLAND	LATITUDE	DEPARTURE
STATION	146+462.27	490725.1629	424511.7809
TO	AZIMUTH UP = 289°12	'45.0" L	ENGTH = 2,313.9589'
STATION	148+776.23	491486.6236	422326.6988
RANGE	COCHRAN	LATITUDE	DEPARTURE
STATION	148+776.23	491486.6236	422326.6988
TO	AZIMUTH UP = 312°30	'52.3"	LENGTH = 1,892.8978'
STATION	150+669.12	492765.8008	420931.4326
RANGE	MOON	LATITUDE	DEPARTURE
STATION	150+669.12	492765.8008	420931.4326
TO	AZIMUTH UP = 334°44	'57.1"	LENGTH = 1,148.9284'
STATION	151+818.05	493804.9481	420441.3210
RANGE	TRENTON (25')	LATITUDE	DEPARTURE
STATION	151+818.05	493804.9481	420441.3210
TO	AZIMUTH $UP = 348°17$	'41.7"	LENGTH = 1,222.6375'
STATION .L. Parallel	153+040.69 to Edges 153+040.69	495002.1606 494990.5813	420193.2797 420137.3929
RANGE		LATITUDE	DEPARTURE
STATION	End of 2	5' Project Dept	<u>h</u>
TO	====== AZIMUTH		= LENGTH =

TO AZIMUTH UP = LENGTH =

STATION

RANGE LATITUDE DEPARTURE

STATION

TO AZIMUTH UP = LENGTH =

STATION

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

(12' Channel)

DELAWARE RIVER PHILADELPHIA TO TRENTON NAD 83 - CENTERLINE COORDINATES

RANGE	TRENTON (12')	LATITUDE	DEPARTURE
STATION	153+040.69	495002.1606	420193.2797
TO	AZIMUTH UP = 348°	17'37.8" LE	ENGTH = 2,005.3469'
STATION	155+046.04	496965.7983	419786.4094
RANGE	LALOR	LATITUDE	DEPARTURE
STATION	155+046.04	496965.7983	419786.4094
TO	AZIMUTH UP = 339°	57'51.6"	LENGTH = 972.3996'
STATION	156+018.44	497879.3478	419453.2605
RANGE	LANDING	LATITUDE	DEPARTURE
STATION	156+018.44	497879.3478	419453.2605
TO	AZIMUTH UP = 328°	10'04.6"	LENGTH = 1,206.7408
STATION	157+225.18	498904.5920	418816.7876
RANGE	<u>AMERICAN</u>	LATITUDE	DEPARTURE
STATION	157+225.18	498904.5920	418816.7876
TO	AZIMUTH UP = 327°	21'55.8"	LENGTH = 1,256.0597
STATION	158+481.24	499962.3547	418139.4222
RANGE	FEDERAL	LATITUDE	DEPARTURE
STATION	158+481.24	499962.3547	418139.4222
TO	AZIMUTH UP = 330°	41'03.6"	LENGTH = 552.6054'
STATION	159+033.84	500444.1910	417868.8551
RANGE	BRIDGE	LATITUDE	DEPARTURE
STATION	159+033.84	500444.1910	417868.8551
TO	AZIMUTH UP = 336°	05'38.4"	<i>LENGTH</i> = 501.2669
STATION	159+535.11 <u>Er</u>	500902.4550 ad of Project	417665.7230

^{**} NEW JERSEY STATE PLANE - ZONE 2900 - U.S.FOOT

Printed with an evaluation copy of Dr. Form

SURVEY 4-930609-4-0609 08-26-1994 8:05 AM Page 3

Reg. to: U.S. Army Corps of Engineers File Name: C:\SIMPLCTY\SURVEYS\0000.DAT

Job: NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot Philadelphia to Sea HARBOR RANGE Station 0+000

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
2	CENTERLINE 0+000 West Edge 0+000 East Edge 0+000		416262.96870 416462.13665 416063.80075	325346.56552 325314.89672 325378.23432	

File: 0000.DAT

Session terminated at 8:06 AM on 08-26-1994

0+000

To Sea of

To Trenton ->
Range

200,

0000

08-26-1994

8:05 AM

SURVEY 4-930609-4-0609 11-02-1994 9:45 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\HARBFISH.DAT

Job: HARBOR & FISHER RANGE INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

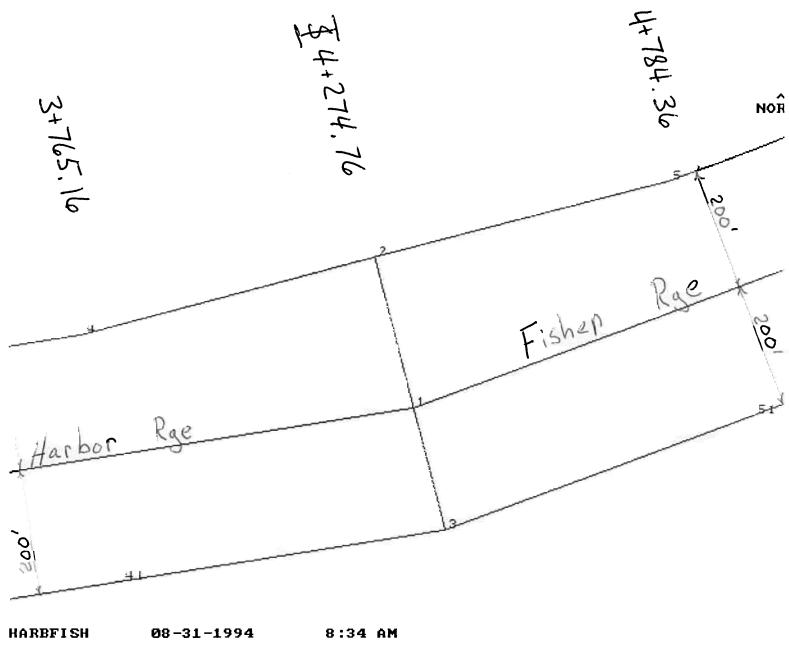
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	West Edge Knuckle C.L. 3+765.16 Break Point 3+765.		417051.63765 416854.11808 416656.60034	329033.63299 329065.03394 329096.43459	
1 2 3	CENTERLINE 4+274.7 West Edge Intersec East Edge Intersec	tion	416934.12770 417175.05621 416739.70621	329568.31380 329505.26691 329619.19059	
	West Edge Knuckle C.L. 4+784.36 Break Point 4+784.		417298.47478 417110.89205 416923.31105	329976.90084 330046.27460 330115.64772	

File: HARBFISH.DAT

Session terminated at 9:45 AM on 11-02-1994



SURVEY 4-930609-4-0609 11-02-1994 9:46 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\FISHDRAW.DAT

Job: FISHER & DRAW RANGE INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

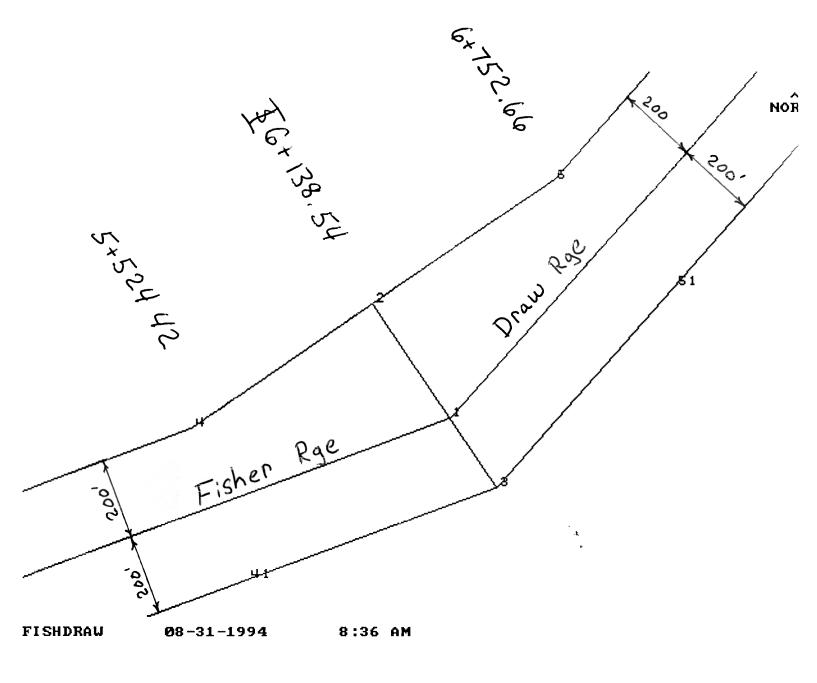
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	West Edge Knuckle C.L. 5+524.42 Break Point 5+524.		417555.17795 417367.59522 417180.01249	330671.01138 330740.38514 330809.75890	
	CENTERLINE 6+138.5 West Edge Intersec East Edge Intersec	tion	417580.61360 417864.20587 417410.48070	331316.37480 331122.08918 331432.93078	
500	West Edge Knuckle C.L. 6+752.66 Break Point 6+752.		418173.23380 418040.79666 417908.35953	331573.16697 331723.03494 331872.90290	

File: FISHDRAW.DAT

Session terminated at 9:47 AM on 11-02-1994



SURVEY 4-930609-4-0609 11-02-1994 9:48 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\DRADELAR.DAT

DRAW & DELAIR RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates

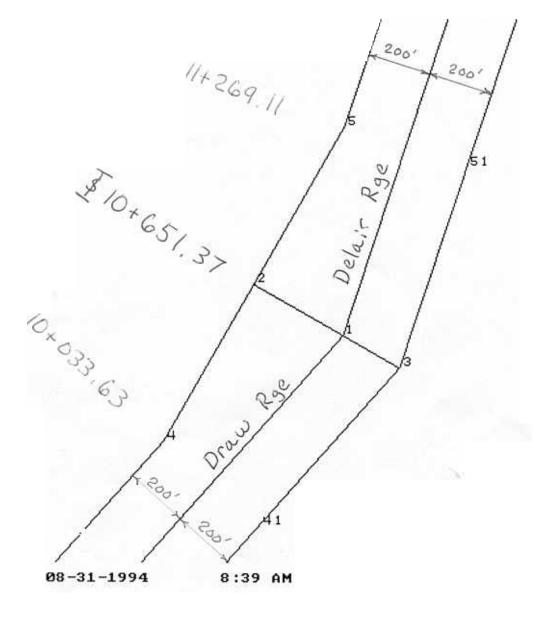
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	West Edge Knuckle C.L. 10+033.63 Break Point 10+03		420631.79726 420499.36013 420366.92299	333745.78072 333895.64868 334045.51664	
1 2 3	CENTERLINE 10+651 West Edge Interse East Edge Interse	ction	420962.25430 421121.67674 420860.76482	334304.70460 334026.33702 334481.91542	
	West Edge Knuckle C.L. 11+269.11 Break Point 11+26		421611.55621 421549.31089 421487.06557	334306.89333 334496.96048 334687.02762	

File: DRADELAR.DAT

Session terminated at 9:48 AM on 11-02-1994



DRADELAR

/

11-10-1994 8:19 AM Page 1

SURVEY 4-930609-4-0609

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\DELBRIDE.DAT

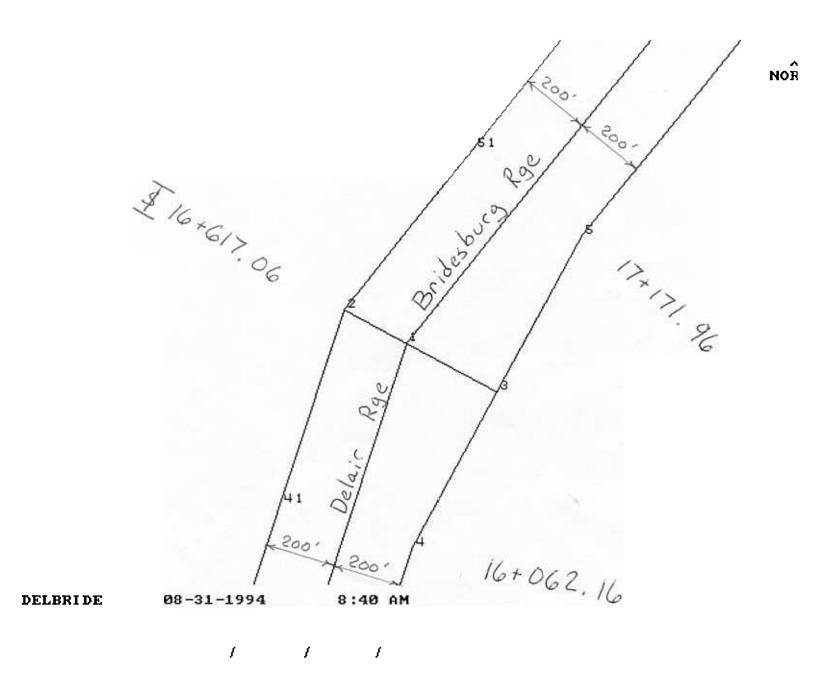
DELAIR & BRIDESBURG RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	East Edge Knuckle C.L. 16+062.16 Break Point 16+06		426042.08288 426104.32820 426166.57352	336178.75441 335988.68726 335798.62011	
	CENTERLINE 16+617 West Edge Interse East Edge Interse	ction	426631.66950 426728.71960 426490.04658	336161.38690 335982.72973 336422.09711	
	East Edge Knuckle C.L. 17+171.96 Break Point 17+17		426938.01028 427063.57625 427189.14222	336665.43981 336509.76969 336354.09957	

File: DELBRIDE.DAT

Session terminated at 8:20 AM on 11-10-1994



SURVEY 4-930609-4-0609 11-02-1994 9:51 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\BRIFRANK.DAT

Job: BRIDESBURG & FRANKFORD RANGE INTERSECTION

Philadelphia to Trenton

NAD 83 Coordinates

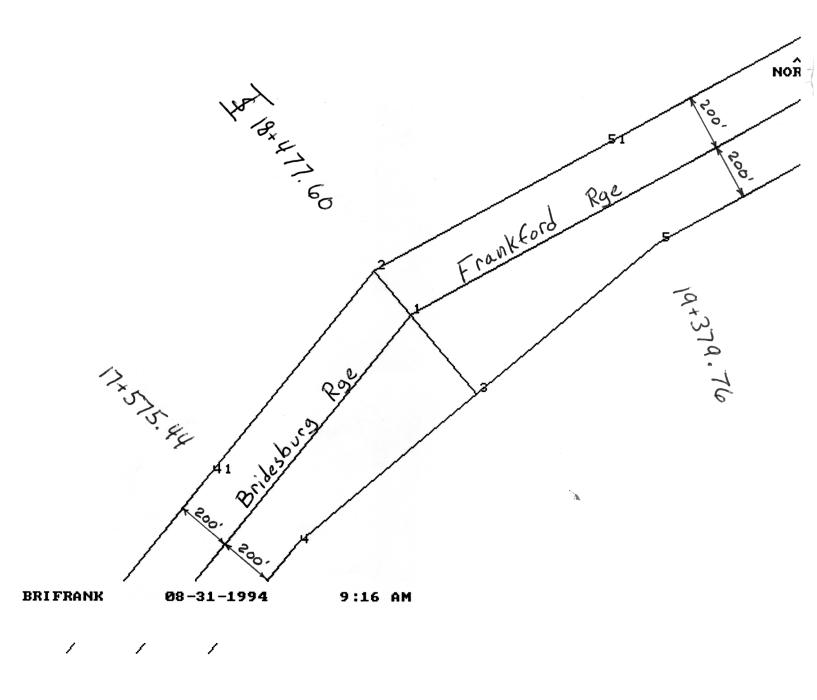
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	East Edge Knuckle : C.L. 17+575.44 Break Point 17+575		427252.05684 427377.62282 427503.18879	336918.75473 336763.08461 336607.41449	
1 2 3	CENTERLINE 18+477.0 West Edge Intersect East Edge Intersect	cion	428079.81960 428236.15085 427795.23362	337329.48760 337198.63460 337567.69288	
	East Edge Knuckle : C.L. 19+379.76 Break Point 19+379		428338.41039 428513.75495 428689.09950	338216.63103 338120.43183 338024.23263	

File: BRIFRANK.DAT

Session terminated at 9:51 AM on 11-02-1994



SURVEY 4-930609-4-0609 11-02-1994 9:57 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\T-P!BRDG.DAT

Job: FRANKFORD RANGE AT TACONY PALMYRA BRIDGE

Philadelphia to Trenton NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

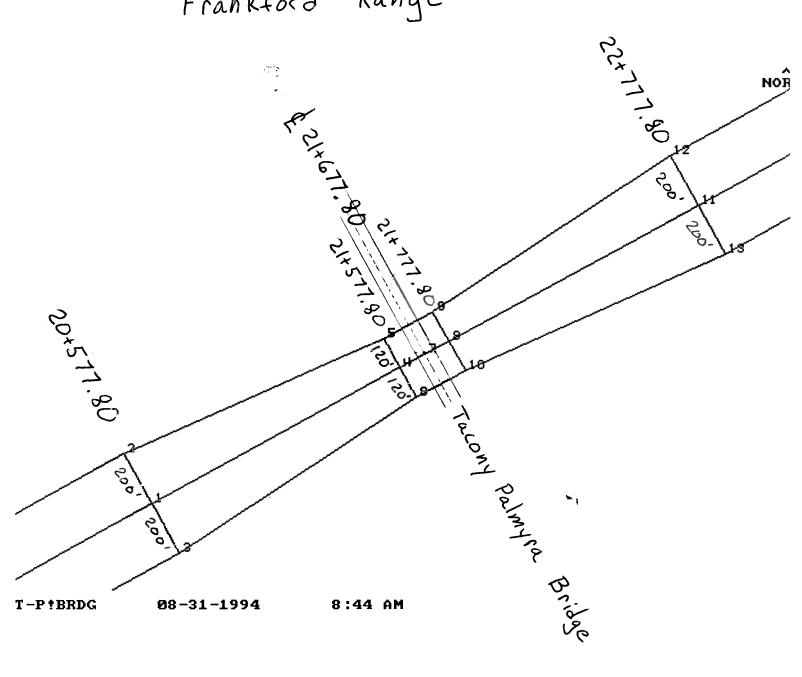
By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
2	CENTERLINE 20+577.80 W.E. 20+577.80 E.E. 20+577.80		429090.00739 429265.35195 428914.66283	339170.78081 339074.58161 339266.98001	
5	CENTERLINE 21+577.80 W.E. 21+577.8 E.E. 21+577.80		429571.00338 429676.21012 429465.79665	340047.50360 339989.78408 340105.22312	
	C.L. @ TACONY PALMYR CENTERLINE 21+777.80 W.E. 21+777.80 E.E. 21+777.80		429619.10298 429667.20258 429772.40932 429561.99585	340135.17588 340222.84816 340165.12864 340280.56768	
11 12 13	CENTERLINE 22+777.80 W.E. 22+777.80 E.E. 22+777.80		430148.19858 430323.54313 429972.85402	341099.57095 341003.37175 341195.77015	

File: T-P!BRDG.DAT

Session terminated at 9:58 AM on 11-02-1994

Frankford Range



SURVEY 4-930609-4-0609 11-02-1994 9:54 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\FRANKTAC.DAT

Job: FRANKFORD & TACONY RANGE INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

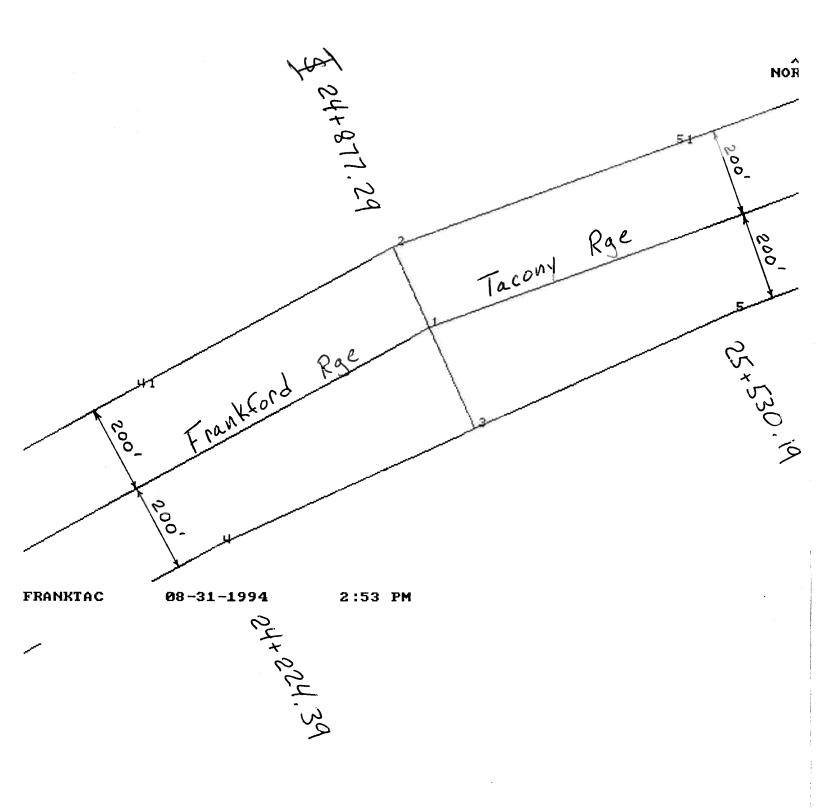
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
4	East Edge Knuckle	24+224 39	430668.65666	342464.02379	
	C.L. 24+224.39	3 21 221.33	430844.00122	342367.82459	
41	Break Point 24+22	24.39	431019.34577	342271.62539	
1	CENTERLINE 24+87	7.29	431158.04350	342940.23690	
	West Edge Interse		431340.77913	342857.50340	
3	East Edge Interse	ection	430930.83060	343043.09420	
5	East Edge Knuckle	25+530.19	431193.01451	343622.18663	
	C.L. 25+530.19		431380.99267	343553.89159	
51	Break Point 25+53	30.19	431568.97083	343485.59655	

File: FRANKTAC.DAT

Session terminated at 9:55 AM on 11-02-1994



SURVEY 4-930609-4-0609 11-02-1994 9:56 AM Page

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\TACOTORR.DAT

TACONY & TORRESDALE RANGE INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

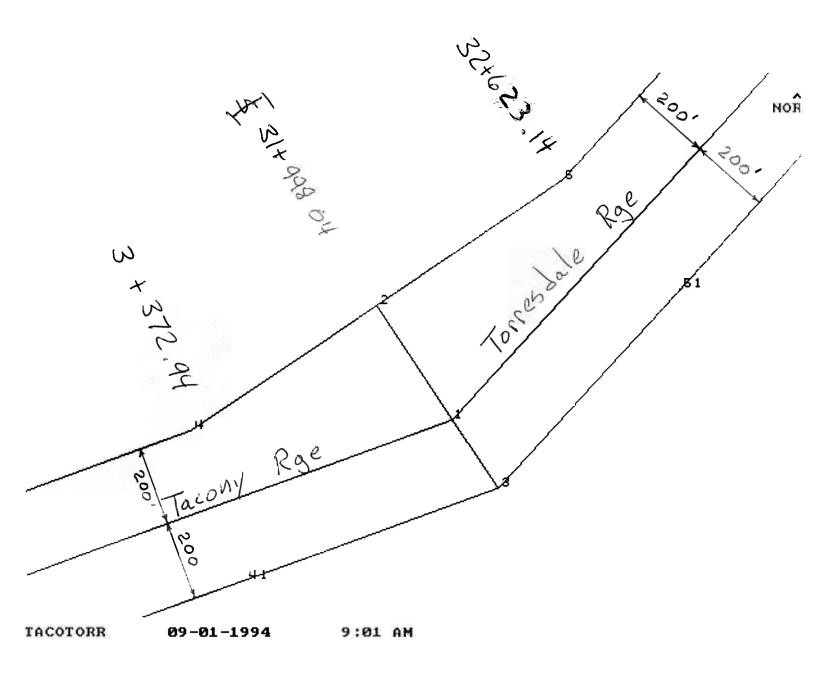
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	West Edge Knuckle C.L. 31+372.94 Break Point 31+372		433564.12860 433376.15044 433188.17229	348977.15043 349045.44547 349113.74052	
1 2 3	CENTERLINE 31+998 West Edge Intersec East Edge Intersec	ction	433589.60660 433875.33934 433418.48682	349632.97120 349441.43332 349747.67951	
	West Edge Knuckle C.L. 32+623.14 Break Point 32+623		434186.55938 434051.96060 433917.36183	349905.73005 350053.65967 350201.58928	

File: TACOTORR.DAT

Session terminated at 9:57 AM on 11-02-1994



11-02-1994 9:59 AM Page 1

SURVEY 4-930609-4-0609
Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\TORR-MUD.DAT

Job: TORRESDALE & MUD ISLAND INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

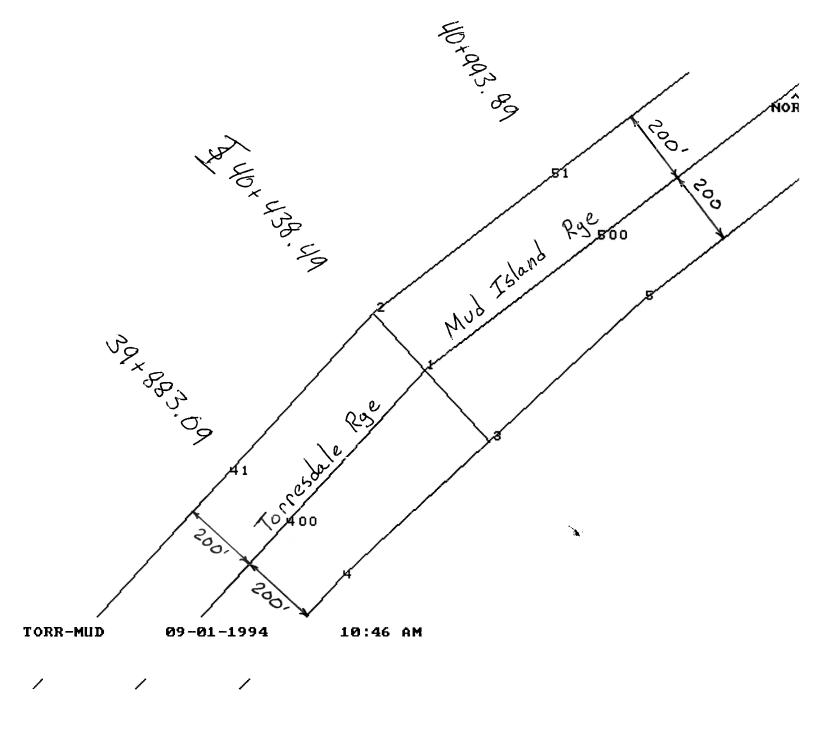
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
400	East Edge Knuckle 3 C.L. 39+883.09 Break Point 39+883.		439287.17039 439421.76917 439556.36794	355087.49082 354939.56121 354791.63159	
1	CENTERLINE 40+438.4 West Edge Intersect East Edge Intersect	9 ion	439832.56970 439980.54089 439648.96426	355313.34200 355177.57443 355481.80495	
500	East Edge Knuckle 4 C.L. 40+993.89 Break Point 40+993.		440010.75813 440169.69828 440328.63844	355876.11908 355754.71880 355633.31851	

File: TORR-MUD.DAT

Session terminated at 9:59 AM on 11-02-1994



SURVEY 4-930609-4-0609

11-03-1994

8:27 AM Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\MUDENTER.DAT

Job: MUD ISLAND & ENTERPRISE RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates

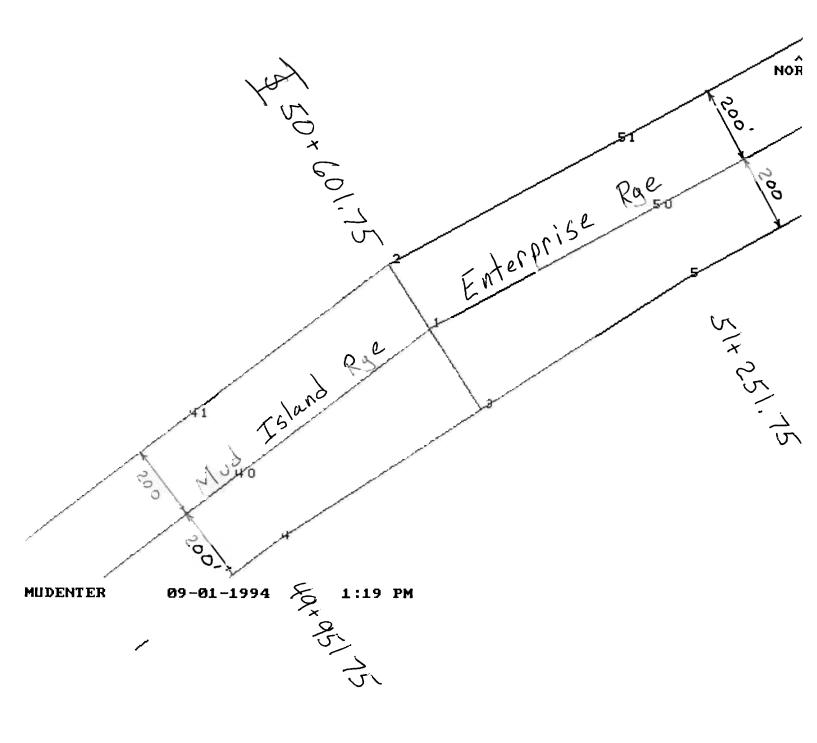
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 4 40 41	East Edge Knuckle C.L. 49+951.75 Break Point 49+951		445448.19023 445607.13038 445766.07053	362994.93249 362873.53221 362752.13193	
1 2 3	CENTERLINE 50+601. West Edge Intersec East Edge Intersec	tion	446001.68130 446169.98611 445792.40810	363390.08770 363280.95481 363525.78548	
	East Edge Knuckle C.L. 51+251.75 Break Point 51+251		446136.62597 446312.30989 446487.99382	364056.63847 363961.06045 363865.48242	

File: MUDENTER.DAT

Session terminated at 8:28 AM on 11-03-1994



SURVEY 4-930609-4-0609 09-02-1994 8:06 AM Page 3

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\ENTRBEV.DAT

Job: ENTERPRISE & BEVERLY RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 60+986 West Edge Interse East Edge Interse	ction	450964.46410 451165.84187 450631.03599	372512.27630 372463.93339 372592.31932	
	East Edge Knuckle C.L. 60+409.72 Break Point 60+40		450513.13314 450688.81706 450864.50099	372101.18190 372005.60387 371910.02584	
	East Edge Knuckle C.L. 61+563.32 Break Point 61+56		450748.93884 450948.86570 451148.79255	373083.45675 373088.86535 373094.27395	

File: ENTRBEV.DAT

Session terminated at 8:07 AM on 09-02-1994

SURVEY 4-930609-4-0609 09-07-1994 1:00 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\BEVREDGE.DAT

Job: BEVERLY & EDGEWATER INTERSECTION

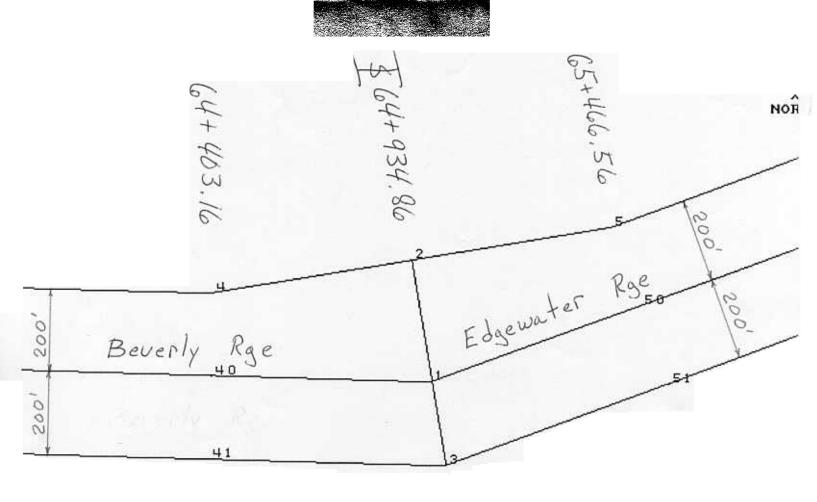
Philadelphia to Trenton
NAD 83 Coordinates
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 64+934.8 West Edge Intersect East Edge Intersect	ion	450857.69010 451150.18304 450656.71616	376459.17060 376411.35516 376492.02492	
	West Edge Knuckle (C.L. 64+403.16 Break Point 64+403		451071.99572 450872.06886 450672.14201	375933.07366 375927.66506 375922.25646	
5 50 51	West Edge Knuckle (C.L. 65+466.56 Break Point 65+466		451228.37036 451040.57348 450852.77660	376889.63667 376958.42861 377027.22055	

File: BEVREDGE.DAT

Session terminated at 1:01 PM on 09-07-1994



BEUREDGE

09-07-1994

1:00 PM

SURVEY 4-930609-4-0609 11-10-1994 8:20 AM Page 1

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\EDGEDEVL.DAT

EDGEWATER & DEVLIN RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

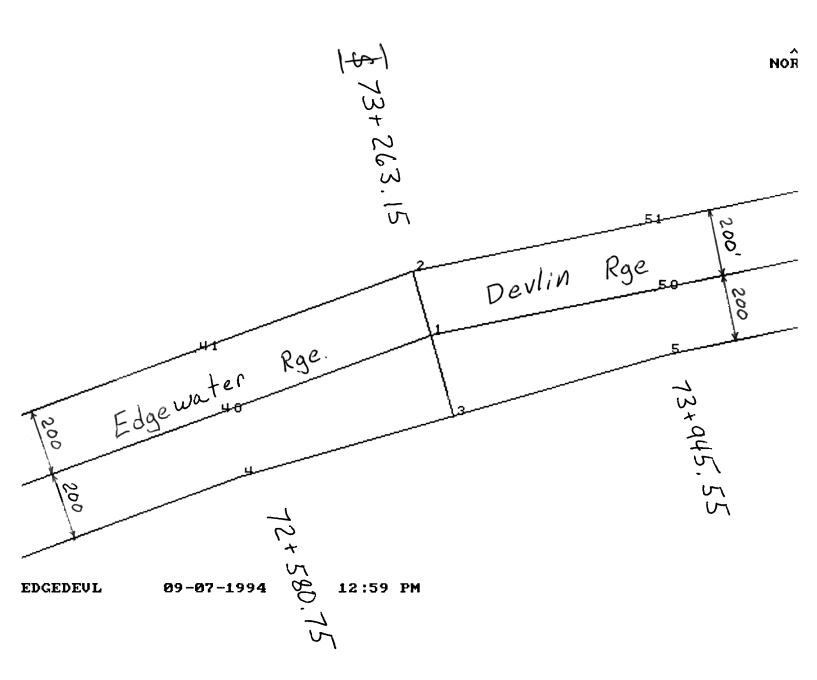
M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	East Edge Knuckle C.L. 72+580.75 Break Point 72+580		453299.77121 453487.56809 453675.36498	383707.33248 383638.54054 383569.74860	
1 2 3	CENTERLINE 73+263. West Edge Intersec East Edge Intersec	tion	453722.28620 453915.14213 453482.38645	384279.30350 384224.30755 384347.71475	
	East Edge Knuckle C.L. 73+945.55 Break Point 73+945		453665.00169 453860.83606 454056.67043	384988.09701 384947.49037 384906.88373	

*

File: EDGEDEVL.DAT

Session terminated at 8:21 AM on 11-10-1994



09-07-1994 12:57 PM Page 3

SURVEY 4-930609-4-0609

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\DEVLLEHI.DAT

Job: DEVLIN & LEHIGH RANGE INTERSECTION

Philadelphia to Trenton

NAD 83 Coordinates

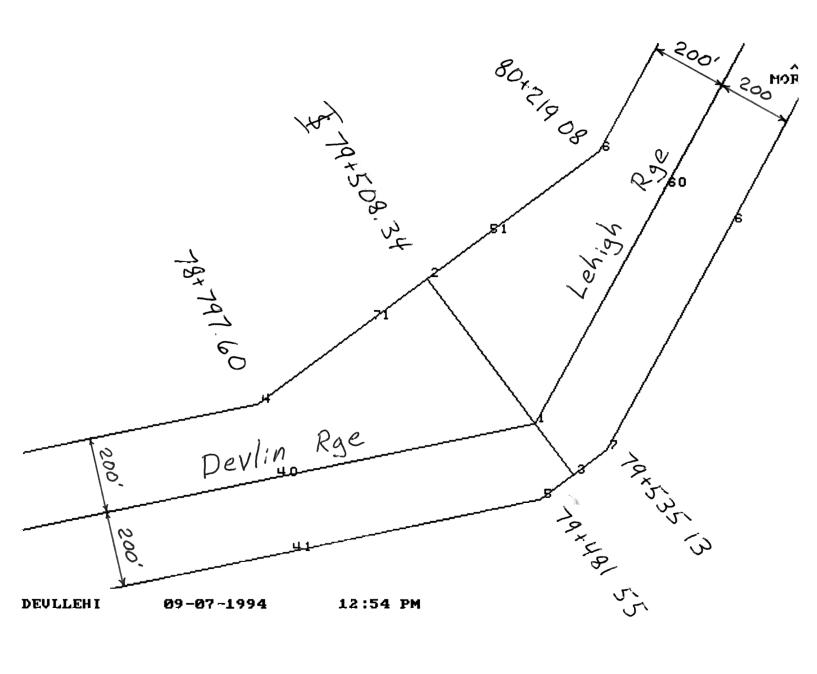
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
	CENTERLINE 79+508.3	3.4	454990.26770	390394.41580	
	West Edge Intersect		455375.79104		
3	East Edge Intersect	tion	454853.38366		
	West Edge Knuckle	78+797.60	455041.79764	389657.86962	
			454845.96327		
	C.L. 78+797.60 Break Point 78+797	.60	454650.12890		
	East Edge Knuckle		454788.99448	390408.79239	
	C.L. 79+481.55		454984.82885	390368.18574	
	Break Point 79+481	. 55	455490.12446	390263.41171	
	West Edge Knuckle	30+219.08	455709.78443	390560.10009	
	C.L. 80+219.08		455613.78898		
	Break Point 80+219	.08	455517.79353		
7	East Edge Knuckle	79+535.13	454917.77285	390582.72962	
	C.L. 79+535.13		455013.76830		
	Break Point 79+535	. 13	455261.45761		

File: DEVLLEHI.DAT

Session terminated at 12:58 PM on 09-07-1994



SURVEY 4-930609-4-0609 09-07-1994 12:53 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\LEHICANL.DAT

Job: LEHIGH & CANAL INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

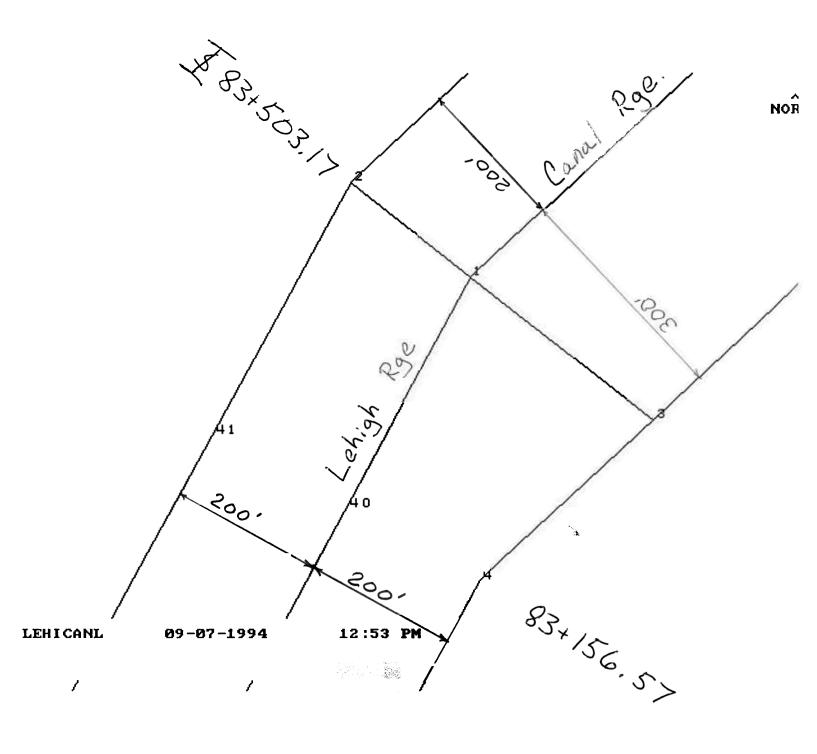
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
1	CENTERLINE 83+503.	17	458494.85310	392311.84100	
2	West Edge Intersect		458619.54227	392152.08129	
3			458307.82704	392551.47071	
4	East Edge Knuckle	83+156.57	458094.79208	392320.93707	
40	C.L. 83+156.57		458190.78753	392145.48088	
41	Break Point 83+156	. 57	458286.78298	391970.02470	

File: LEHICANL.DAT

Session terminated at 12:53 PM on 09-07-1994



SURVEY 4-930609-4-0609 09-07-1994 12:52 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\CANLBRIS.DAT

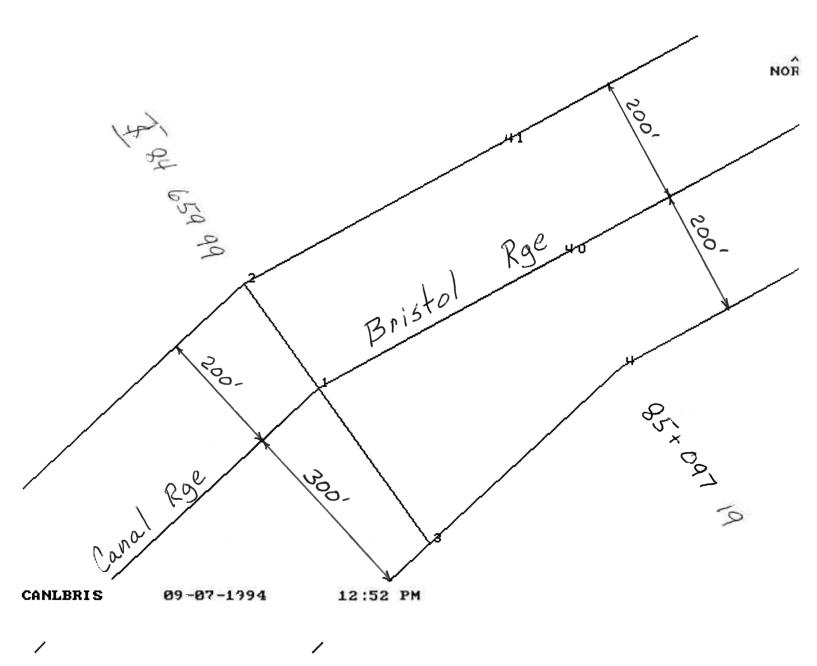
CANAL & BRISTOL RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List			450000 00540		
2	CENTERLINE 84+659.9 West Edge Intersect	ion	459279.97540 459443.55001	393161.44020 393043.76759	
3	East Edge Intersect	ion	459034.63504	393337.93361	
4	East Edge Knuckle 8	5+097.19	459314.66564	393640.96124	
40 41	C.L. 85+097.19 Break Point 85+097.	19	459490.06166 459665.45768	393544.85590 393448.75057	

File: CANLBRIS.DAT

Session terminated at 12:52 PM on 09-07-1994



SURVEY 4-930609-4-0609 09-07-1994 12:51 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\BRISTKEY.DAT

Job: BRISTOL & KEYSTONE RANGE INTERSECTION

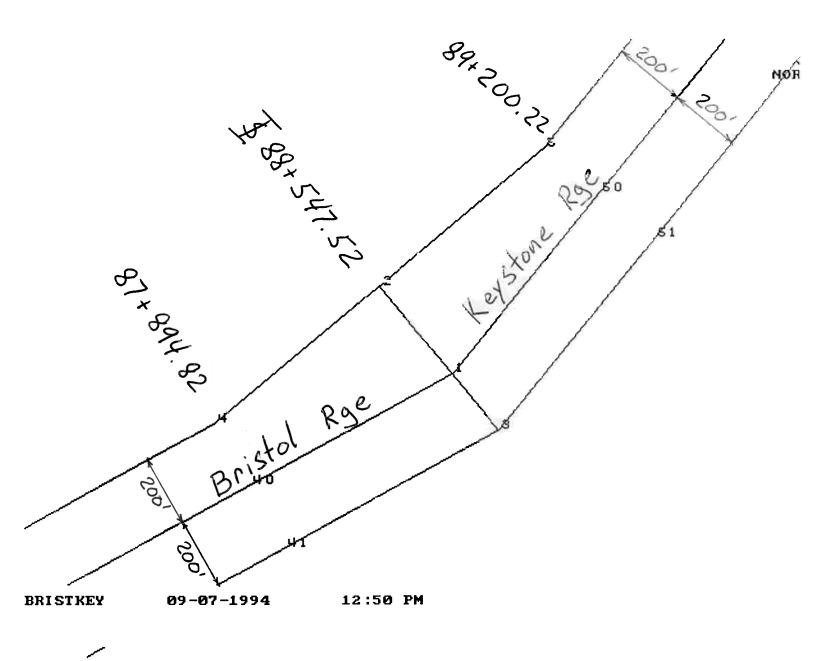
Philadelphia to Trenton
NAD 83 Coordinates
N.J State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 88+547. West Edge Intersections Edge Intersections	tion	461148.03820 461395.07125 460991.41842	396570.72780 396365.12098 396701.08321	
			461009.79446 460834.39844 460659.00242	395902.21755 395998.32288 396094.42822	
5 50 51	West Edge Knuckle C.L. 89+200.22 Break Point 89+200		461780.34805 461654.00103 461527.65401	396828.02442 396983.06129 397138.09816	

File: BRISTKEY.DAT

Session terminated at 12:51 PM on 09-07-1994



SURVEY 4-930609-4-0609 09-07-1994 12:48 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\KEYSLAND.DAT

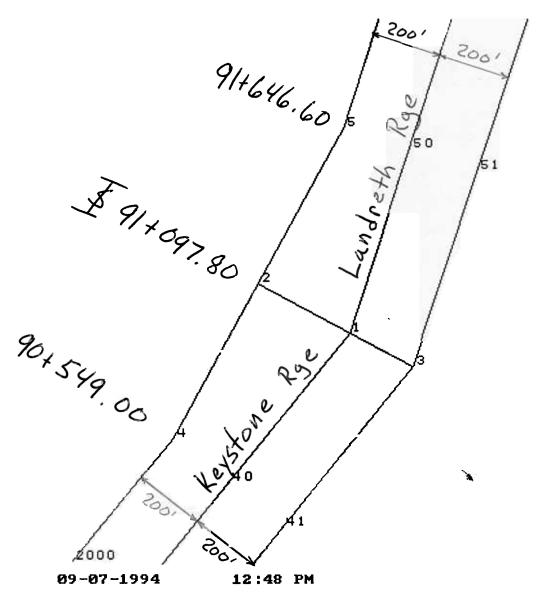
KEYSTONE & LANDRETH INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
List	CENTERLINE 91+097	0.0	463124.97920	398181.83270	
, <u>, , , , , , , , , , , , , , , , , , </u>					
2	West Edge Interse	crion	463267.34704	397921.64521	
3	East Edge Interse	ction	463027.34865	398360.25958	
4	West Edge Knuckle	90+549.00	462825.90504	397680.09962	
40	C.L. 90+549.00		462699.55802	397835.13649	
	Break Point 90+54	9.00	462573.21101	397990.17336	
			.010,0111101	03.33012.000	
5	West Edge Knuckle	91+646.60	463708.78903	398163.19080	
50	C.L. 91+646.60		463646.34056	398353.19130	
	Break Point 91+64	6.60	463583.89209	398543.19180	
J 1	DICAR ICINC JIIO4	0.00	40000000000	220242.13100	

File: KEYSLAND.DAT

Session terminated at 12:50 PM on 09-07-1994



KEYSLAND

SURVEY 4-930609-4-0609 09-07-1994 12:46 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\LANDRIVR.DAT

LANDRETH & RIVERVIEW INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 98+471.25 West Edge Intersecti	ion	470129.76730 470231.32985 469982.65379	400484.13190 400306.96423 400740.75955	
	East Edge Knuckle 97 C.L. 97+975.65 Break Point 97+975.6		469596.49760 469658.94607 469721.39454	400519.38509 400329.38459 400139.38410	
50	West Edge Knuckle 98 C.L. 98+546.35 Break Point 98+546.3		470351.55637 470186.05456 469996.35765	400346.47429 400533.84865 400748.61568	
6 60 61	East Edge Knuckle 98 C.L. 98+723.95 Break Point 98+723.9		470153.66348 470319.16530 470484.66711	400838.79549 400651.42114 400464.04678	

File: LANDRIVR.DAT

Session terminated at 12:47 PM on 09-07-1994

50-NOR 8x546.35 Riverview Rose 98* >>3 2001 97+975.65 12:46 PM LANDRIVR 09-07-1994

SURVEY 4-930609-4-0609 09-16-1994 9:19 AM Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\RIVRFOUN.DAT

Job: RIVERVIEW & FOUNDRY INTERSECTION

Philadelphia to Trenton

NAD 83 Coordinates

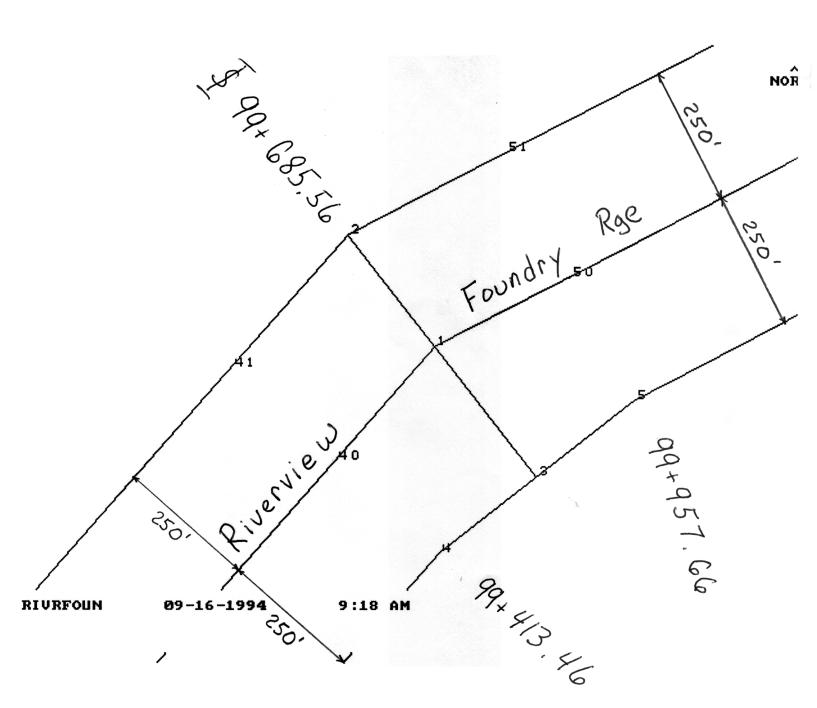
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 99+685. West Edge Intersec East Edge Intersec	tion	471039.89090 471240.36687 470806.81623	401288.01490 401131.52462 401469.95153	
	East Edge Knuckle 9 C.L. 99+413.46 Break Point 99+413		470670.45084 470835.95265 471001.45447	401295.25708 401107.88272 400920.50837	
5 50 51	East Edge Knuckle 9 C.L. 99+957.66 Break Point 99+957		470943.18162 471165.12766 471387.07369	401644.64598 401529.58097 401414.51596	

File: RIVRFOUN.DAT

Session terminated at 9:19 AM on 09-16-1994



SURVEY 4-930609-4-0609 09-15-1994 10:55 AM Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\FOUNCHUR.DAT

FOUNDRY & CHURCH RANGE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 101+03 West Edge Interse East Edge Interse	ction	471662.46050 471907.69020 471378.90766	402488.87380 402418.69503 402570.01973	
4 40 41			471324.66701 471546.61305 471768.55908	402380.48354 402265.41853 402150.35352	
5 50 51	East Edge Knuckle C.L. 101+289.90 Break Point 101+2		471433.14830 471682.36534 471931.58237	402759.55591 402739.78551 402720.01511	

File: FOUNCHUR.DAT

Session terminated at 10:56 AM on 09-15-1994

SURVEY 4-930609-4-0609 09-15-1994 10:57 AM Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\CHURFLOR.DAT

CHURCH & FLORENCE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 102+177 West Edge Intersec East Edge Intersec	tion	471752.59110 471955.56551 471460.95624	403625.01730 403655.00383 403581.93247	
40	East Edge Knuckle C.L. 101+949.32 Break Point 101+94		471485.29601 471734.51305 471983.73008	403416.90364 403397.13324 403377.36284	
50	West Edge Knuckle C.L. 102+120.62 Break Point 102+12		471997.27676 471748.05972 471459.65189	403548.12636 403567.89676 403590.77616	
6 60 61	East Edge Knuckle C.L. 102+624.22 Break Point 102+62		471404.00808 471590.31968 471776.63129	403968.05311 404040.77165 404113.49018	

File: CHURFLOR.DAT

Session terminated at 10:58 AM on 09-15-1994

SURVEY 4-930609-4-0609 09-15-1994 11:01 AM Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\PHL2TREN\FLORROEB.DAT

Job: FLORENCE & ROEBLING RANGE INTERSECTION

Philadelphia to Trenton

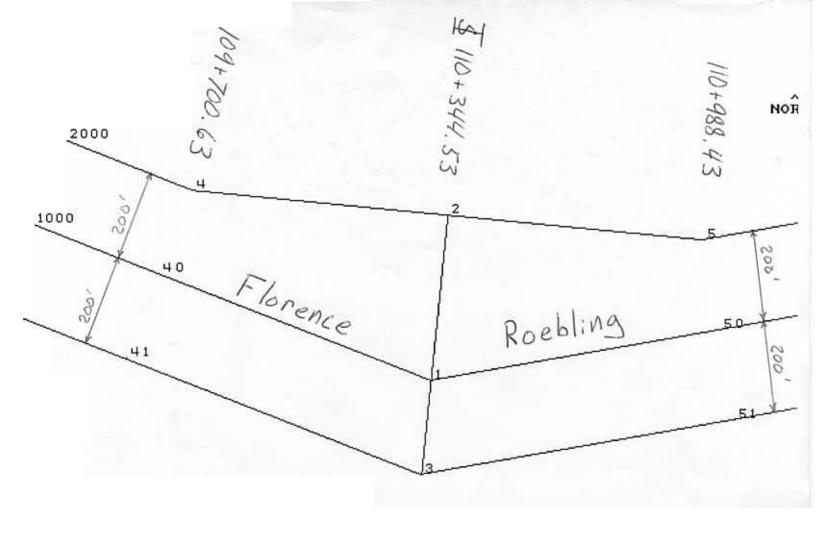
NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 110+344 West Edge Intersec East Edge Intersec	tion	468783.27100 469148.71481 468576.44344	411232.69190 411268.39457 411212.48552	
4 40 41	West Edge Knuckle 109+700.63 C.L. 109+700.63		469203.69994 469017.38833 468831.07673	410705.58022 410632.86169 410560.14315	
	West Edge Knuckle C.L. 110+988.43 Break Point 110+98		469093.72969 468896.86663 468700.00356	411831.20891 411866.49253 411901.77616	

File: FLORROEB.DAT

Session terminated at 11:01 AM on 09-15-1994



FLORROEB

09-15-1994

11:00 AM

SURVEY 4-930609-4-0609 09-15-1994 2:46 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\ROEBKINK.DAT

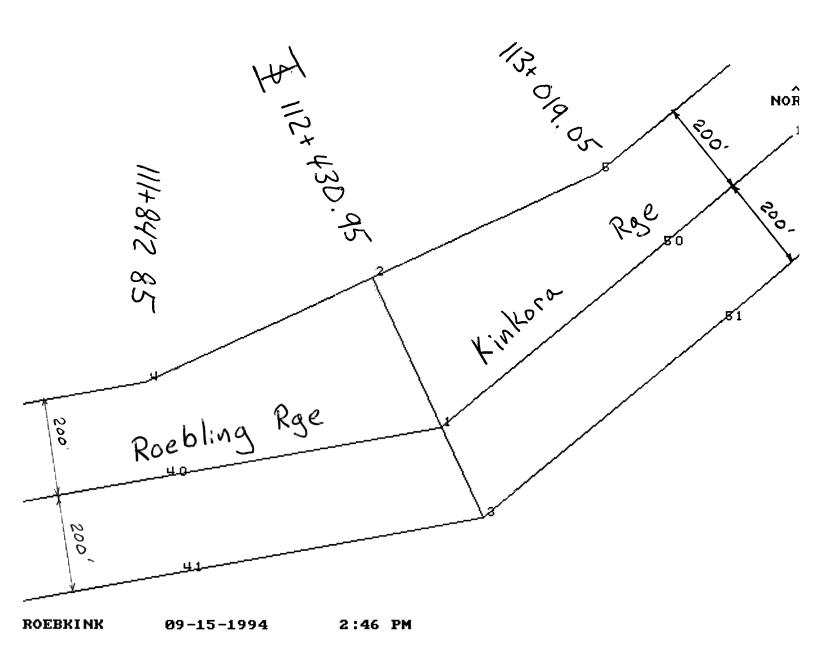
ROEBLING & KINKORA INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 112+430. West Edge Intersect East Edge Intersect	ion	469151.35300 469462.58139 468963.77786	413286.38290 413141.82644 413373.50605	
4 40 41	West Edge Knuckle 1 C.L. 111+842.85 Break Point 111+842		469244.46457 469047.60150 468850.73844	412672.22344 412707.50706 412742.79068	
5 50 51	West Edge Knuckle 1 C.L. 113+019.05 Break Point 113+019		469680.69821 469526.74202 469372.78583	413611.42945 413739.09108 413866.75271	

File: ROEBKINK.DAT

Session terminated at 2:47 PM on 09-15-1994



SURVEY 4-930609-4-0609 09-16-1994 1:49 PM Page 4

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\KINKPENN.DAT

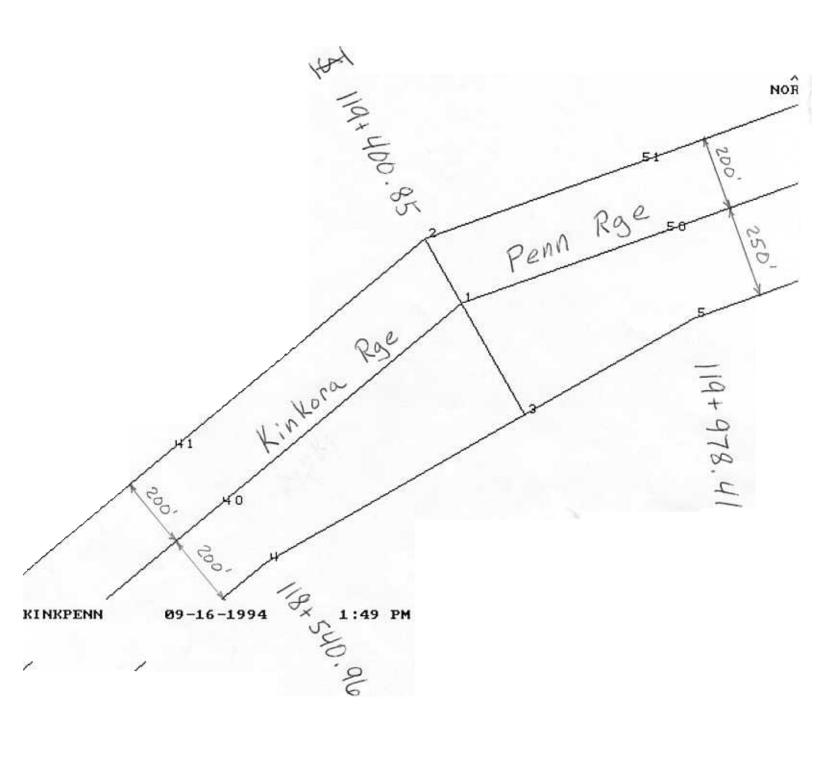
KINKORA & PENN INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 119+400 West Edge Intersec East Edge Intersec	tion	473600.29940 473776.85950 473298.74111	418651.68470 418551.29446 418823.14762	
	East Edge Knuckle C.L. 118+540.96 Break Point 118+54		472897.46842 473051.42461 473205.38080	418117.41939 417989.75776 417862.09613	
5 50 51	East Edge Knuckle C.L. 119+978.41 Break Point 119+97		473558.29220 473793.83810 473982.27482	419279.62654 419195.85225 419128.83283	

File: KINKPENN.DAT

Session terminated at 1:50 PM on 09-16-1994



SURVEY 4-930609-4-0609 09-20-1994 7:52 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\PENNNEWB.DAT

PENN & NEWBOLD INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 121+507 West Edge Intersect East Edge Intersect	tion	474306.12840 474509.41564 473839.58313	420636.24450 420610.94465 420694.30778	
4 40 41	C.L. 120+461.46		473720.16138 473955.70728 474144.14400	419734.74914 419650.97486 419583.95543	
5 50 51	East Edge Knuckle : C.L. 122+778.74 Break Point 122+778		473987.56964 474186.68530 474385.80097	421883.38512 421902.17212 421920.95913	

File: PENNNEWB.DAT

Session terminated at 7:53 AM on 09-20-1994

11:25 AM Page 1 SURVEY 4-930609-4-0609 09-26-1994

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\NEWBLAKE.DAT

(40') NEWBOLD & (25') BLAKE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates

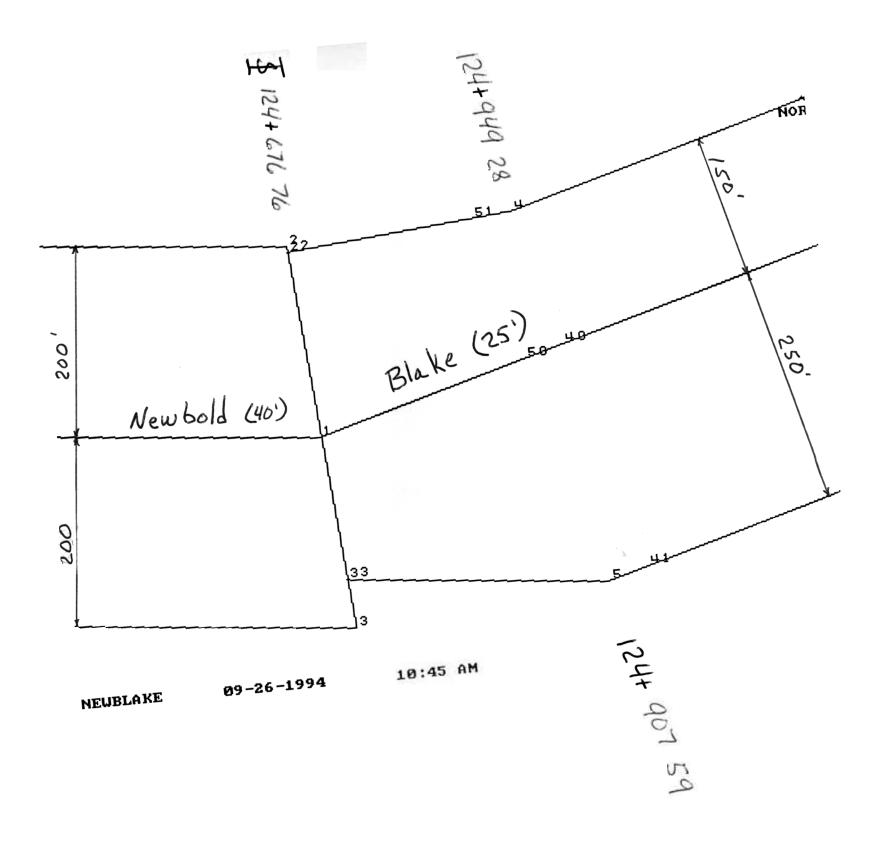
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
1	CENTERLINE 124+676.	76	474008.39470	423791.79980	
2	West Edge Intersect		474211.01413	423773.45190	
3	East Edge Intersect	ion (40')	473805.77527	423810.14770	
22 33	West Edge Intersect East Edge Intersect		474204.95788 473856.43012	423774.00031 423805.56073	
List	•	•	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
5	East Edge Knuckle 1	24+907.59	473830.37928	424081.78773	
50	C.L. 124+907.59		474071.00671	424013.97591	
51	Break Point 124+907	.59	474222.85761	423971.18243	
4	West Edge Knuckle 1	24+949.28	474226.69146	424013.41585	
40	C.L. 124+949.28		474082.31501	424054.10294	
41	Break Point 124+949	.28	473841.68758	424121.91476	

File: NEWBLAKE.DAT

Session terminated at 11:28 AM on 09-26-1994



SURVEY 4-930609-4-0609 09-26-1994 11:25 AM Page 1

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\NEWBLAKE.DAT

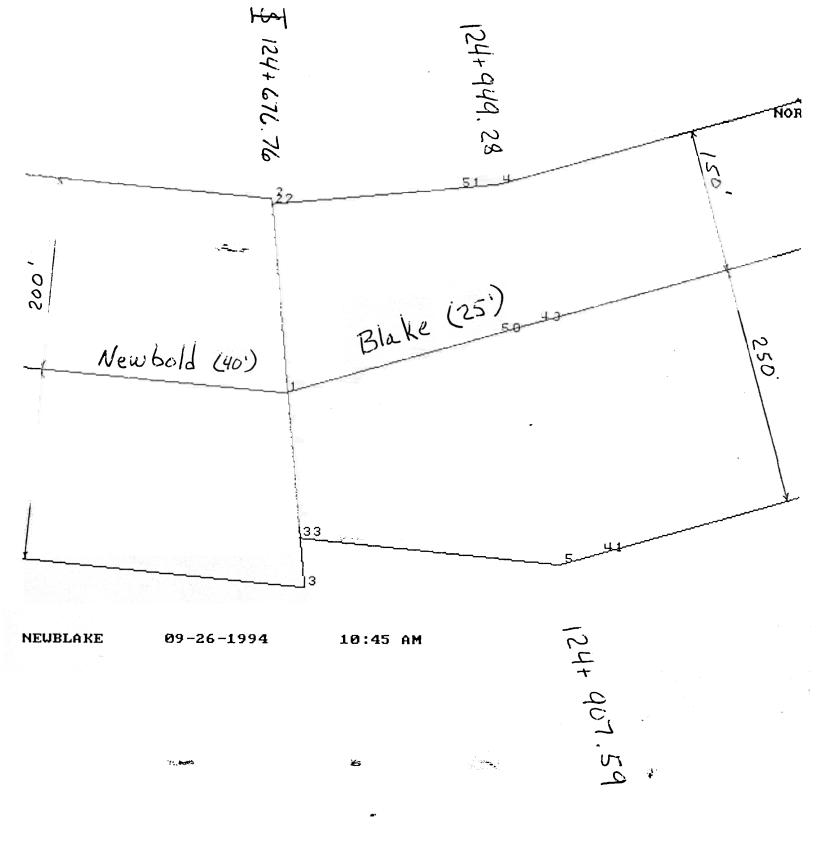
(40') NEWBOLD & (25') BLAKE INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	<u>Easting</u>	Elevation
List 1 2	CENTERLINE 124+676. West Edge Intersect	ion (40')	474008.39470 474211.01413	423791.79980 423773.45190	
3 22 33 List	East Edge Intersect West Edge Intersect East Edge Intersect	ion (25')	473805.77527 474204.95788 473856.43012	423810.14770 423774.00031 423805.56073	
5 50 51	East Edge Knuckle 1 C.L. 124+907.59 Break Point 124+907		473830.37928 474071.00671 474222.85761	424081.78773 424013.97591 423971.18243	
4 40 41	West Edge Knuckle 1 C.L. 124+949.28 Break Point 124+949		474226.69146 474082.31501 473841.68758	424013.41585 424054.10294 424121.91476	

File: NEWBLAKE.DAT

Session terminated at 11:28 AM on 09-26-1994



SURVEY 4-930609-4-0609

09-29-1994 8:56 AM Page 5

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\BLAKWHIT.DAT

Job: BLAKE & WHITEHILL INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

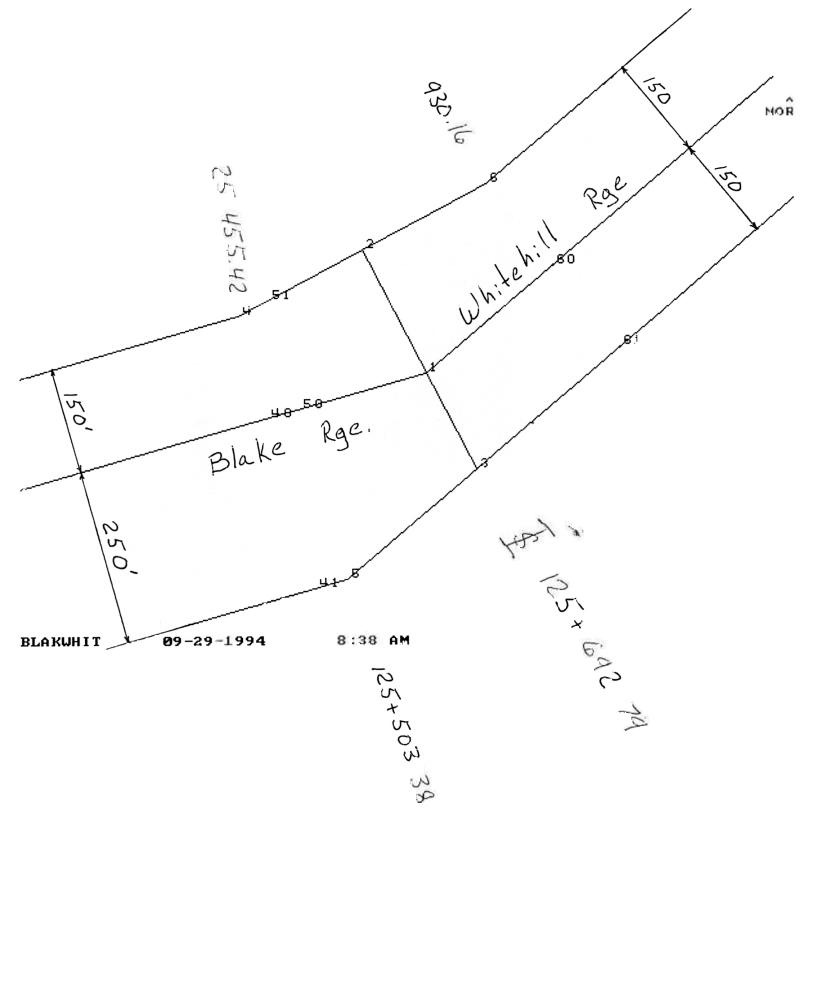
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 125+692. West Edge Intersect East Edge Intersect	ion	474283.98930 474457.74000 474148.36090	424769.73600 424677.82557 424841.48054	
	West Edge Knuckle 1 C.L. 125+455.42 Break Point 125+455		474363.97979 474219.60334 473978.97591	424500.57798 424541.26507 424609.07689	
	East Edge Knuckle 1 C.L. 125+503.38 Break Point 125+503		473991.98493 474232.61236 474386.91828	424655.23885 424587.42704 424543.94170	
	West Edge Knuckle 1 C.L. 125+930.16 Break Point 125+930		474551.50021 474436.62262 474321.74504	424855.07316 424951.52595 425047.97874	

File: BLAKWHIT.DAT

Session terminated at 8:57 AM on 09-29-1994



SURVEY 4-930609-4-0609 09-29-1994 1:19 PM Page 5

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\WHITRARI.DAT

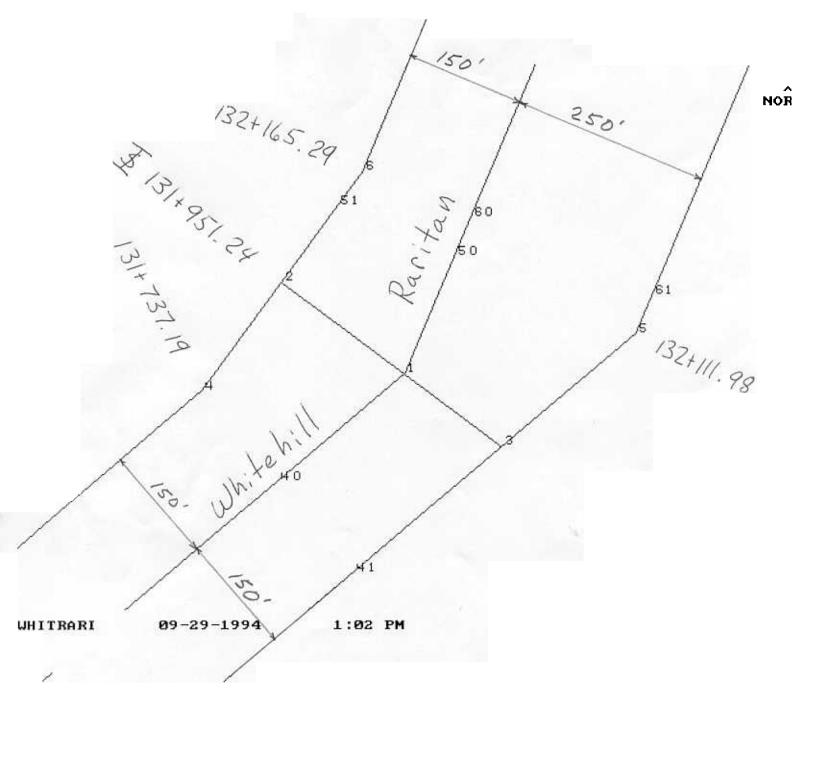
WHITEHILL & RARITAN INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 131+951. West Edge Intersect East Edge Intersect	ion	478308.29000 478424.74705 478216.52412	429562.77380 429405.43508 429686.75364	
40	West Edge Knuckle 1 C.L. 131+737.19 Break Point 131+737		478285.52946 478170.65187 478055.77429	429302.39070 429398.84348 429495.29627	
50	East Edge Knuckle 1 C.L. 132+111.98 Break Point 132+111		478358.40257 478456.21621 478519.90230	429855.73468 429625.66406 429475.86593	
60	West Edge Knuckle 1 C.L. 132+165.29 Break Point 132+165		478563.96465 478505.27647 478407.46283	429508.47946 429646.52184 429876.59246	

File: WHITRARI.DAT

Session terminated at 1:20 PM on 09-29-1994



SURVEY 4-930609-4-0609 09-30-1994 9:40 AM Page 4

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\RARIBORD.DAT

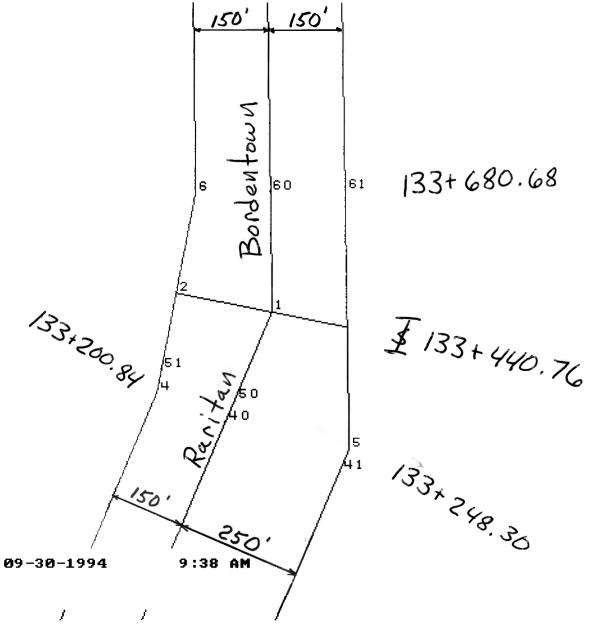
Job: RARITAN & BORDENTOWN INTERSECTION
Philadelpia to Trenton
NAD 83 Coordinates
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 133+440. West Edge Intersect East Edge Intersect	ion	479679.07110 479716.66397 479649.75401	430145.55630 429952.53823 430296.08294	
	West Edge Knuckle 1 C.L. 133+200.84 Break Point 133+200		479516.96510 479458.27692 479360.46329	429913.64413 430051.68651 430281.75714	
50	East Edge Knuckle 1 C.L. 133+248.30 Break Point 133+248		479404.13989 479501.95353 479564.59253	430300.32608 430070.25545 429922.92023	
60	West Edge Knuckle 1 C.L. 133+680.68 Break Point 133+680		479916.36293 479918.95527 479921.54761	429991.43234 430141.40994 430291.38754	

File: RARIBORD.DAT

Session terminated at 9:40 AM on 09-30-1994



NOR

RARIBORD

SURVEY 4-930609-4-0609

10-03-1994 9:39 AM

Page 2

Reg. to: U.S. Army Corps of Engineers File Name: B:\P2T25&12\BORDDUCK.DAT

Job: BORDENTOWN & DUCK ISLAND RANGE INTERSECTION

Philadelphia to Trenton

NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 4 40 41	West Edge Knuckle C.L. 137+044.37 Break Point 137+04		483279.54937 483282.14171 483284.73405	429933.29987 430083.27747 430233.25506	
1 2 3	CENTERLINE 137+383 West Edge Intersec East Edge Intersec	ction	483619.59130 483543.82153 483668.54871	430077.44470 429846.56966 430226.62088	
50	West Edge Knuckle C.L. 137+719.37 Break Point 137+71		483808.09369 483894.87463 483981.65556	429759.83945 429882.18759 430004.53574	

File: BORDDUCK.DAT

Session terminated at 9:40 AM on 10-03-1994

BORDDUCK

10-03-1994

8:50 AM

150 + 150

SURVEY 4-930609-4-0609 10-03-1994 11:24 AM Page 4

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\DUCKPERI.DAT

Job: DUCK ISLAND & PERRIWIG INTERSECTION Philadelphia to Trenton

NAD 83 Coordinates

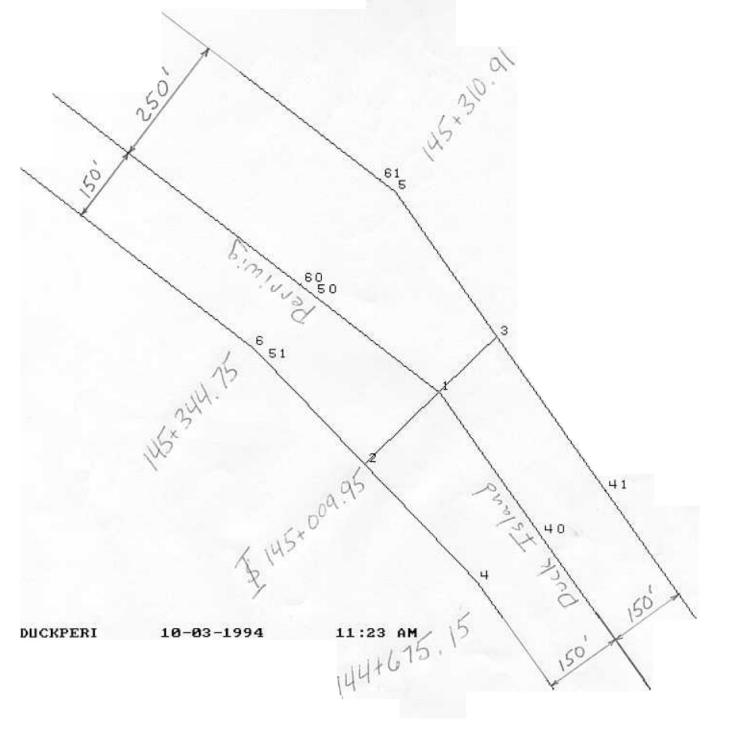
N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
40	West Edge Knuckle 1 C.L. 144+675.15 Break Point 144+675		489481.60360 489568.38453 489655.16547	425735.64790 425857.99605 425980.34419	
2	CENTERLINE 145+009. West Edge Intersect East Edge Intersect	ion	489841.46560 489703.87513 489946.71644		
	East Edge Knuckle 1 C.L. 145+310.91 Break Point 145+310		490222.98540 490024.59196 489901.50103	425577.58556 425425.46704 425331.08686	
	West Edge Knuckle 1 C.L. 145+344.75 Break Point 145+344		489926.14666 490045.18272 490243.57616	425307.34140 425398.61251 425550.73102	

File: DUCKPERI.DAT

Session terminated at 11:25 AM on 10-03-1994



SURVEY 4-930609-4-0609

10-05-1994 9:14 AM Page 4

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\PERIBILE.DAT

Job: PERRIWIG & BILES ISLAND RANGE INTERSECTION Philadelphia to Trenton

NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List					
	West Edge Knuckle	146+147.47	490414.57920	424670.32681	
	C.L. 146+147.47		490533.61526	424761.59792	
41	Break Point 146+147	7.47	490732.00870	424913.71644	
_	The set of the second s	146.100.45	400000 00460	10100=	
	East Edge Knuckle	146+183.45	490753.90160	424885.16365	
	C.L. 146+183.45 Break Point 146+183) 4 F	490555.50816		
2.1	Break Point 146+163	3.45	490431.88162	424638.25427	
1	CENTERLINE 146+462	. 27	490725.16290	424511.78090	
2	West Edge Intersect		490550.84424		
	East Edge Intersect		490858.87651		
	-				
6	West Edge Knuckle	L46+777.07	490687.10929	424165.15291	
	C.L. 146+777.07		490828.75498	424214.51381	
61	Break Point 146+77	7.07	490970.40067	424263.87471	

File: PERIBILE.DAT

Session terminated at 9:15 AM on 10-05-1994

A ROM 61 Biles Island 50 40 51 146+147.47 9:04 AM 10-05-1994 PERIBILE

SURVEY 4-930609-4-0609

10-05-1994

11:32 AM

Page 4

Reg. to: U.S. Army Corps of Engineers File Name: C:\SIMPLCTY\SURVEYS\BILECOCH.DAT

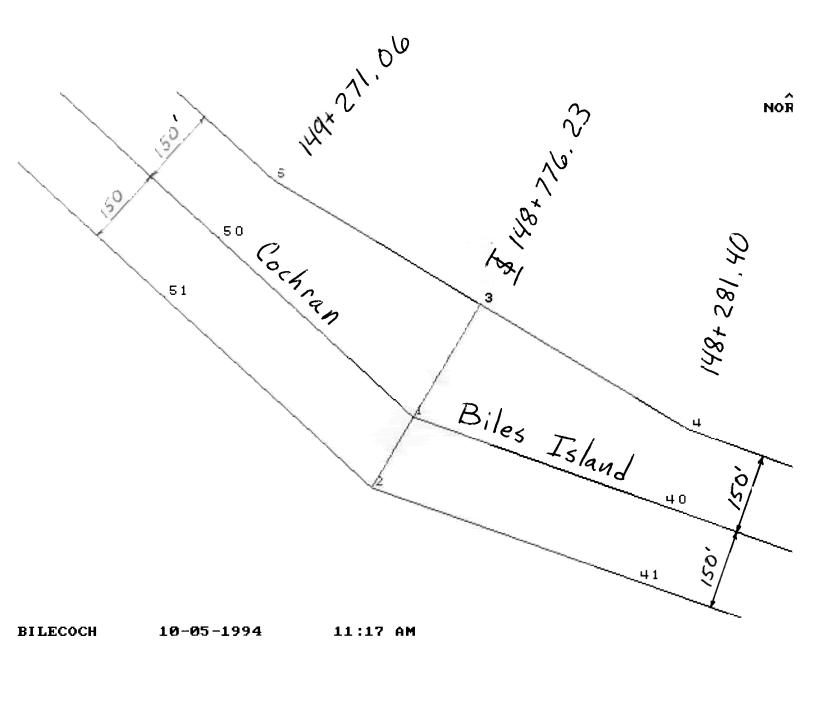
Job: BILES ISLAND & COCHRAN INTERSECTION Philadelphia to Trenton NAD 83 Coordinates N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
	East Edge Knuckle C.L. 148+281.40 Break Point 148+28		491465.43426 491323.78857 491182.14288	422843.32995 422793.96905 422744.60814	
1 2 3	CENTERLINE 148+776 West Edge Intersec East Edge Intersec	tion	491486.62360 491355.15606 491698.50928	422326.69880 422248.13076 422453.32657	
	East Edge Knuckle C.L. 149+271.06 Break Point 149+27		491931.58430 491821.01840 491710.45249	422063.32320 421961.95663 421860.59006	

File: BILECOCH.DAT

Session terminated at 11:33 AM on 10-05-1994



SURVEY 4-930609-4-0609 10-06-1994 10:03 AM Page 3

Reg. to: U.S. Army Corps of Engineers File Name: C:\SIMPLCTY\SURVEYS\COCHMOON.DAT

Job: COCHRAN & MOON INTERSECTION

Philadelphia to Trenton NAD 83 Coordinates

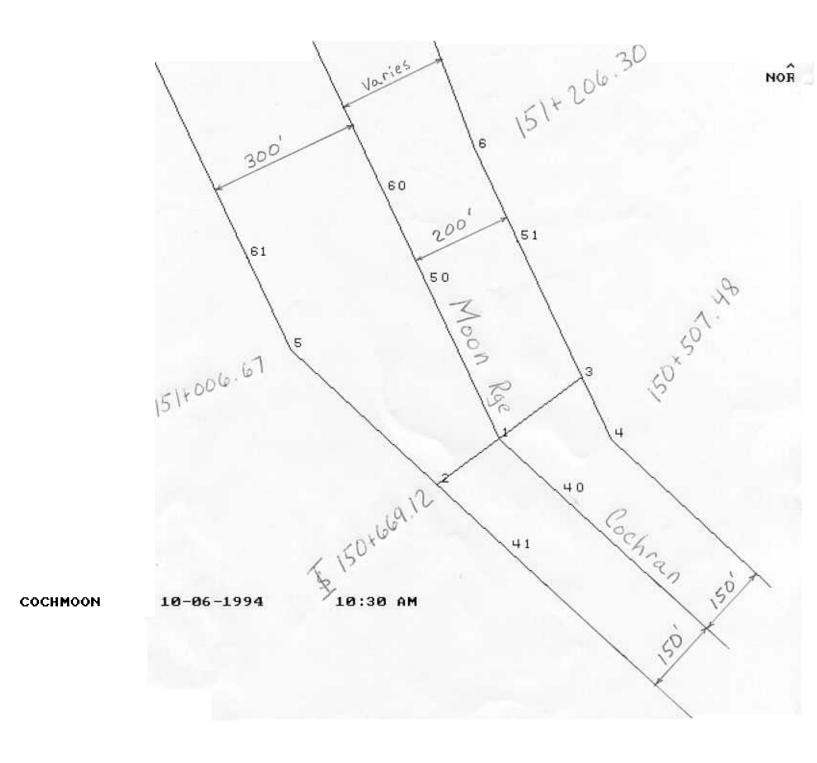
N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
40	East Edge Knuckle C.L. 150+507.48 Break Point 150+5		492767.13409 492656.56819 492546.00228	421151.94499 421050.57842 420949.21185	
2	CENTERLINE 150+66 West Edge Interse East Edge Interse	ction	492765.80080 492675.16128 492886.66770	420931.43260 420808.34891 421095.56348	
50	West Edge Knuckle C.L. 151+006.67 Break Point 151+0		492943.12317 493071.09761 493156.41390	420516.10529 420787.44003 420968.32986	
	East Edge Knuckle C.L. 151+206.30 Break Point 151+2		493336.96908 493251.65279 493123.67836	420883.17140 420702.28157 420430.94683	

File: COCHMOON.DAT

Session terminated at 10:05 AM on 10-06-1994



SURVEY 4-930609-4-0609 11-09-1994 2:17 PM Page 1

Reg. to: U.S. Army Corps of Engineers File Name: B:\P2T25&12\TRENTON.DAT

Job: MOON & TRENTON (25') + TRENTON (25') & TRENTON (12' INTERSECTIONS

Philadelphia to Trenton

NAD 83 Coordinates

N.J. State Plane (2900), U.S. Survey Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
50	West Edge Knuckle CENTERLINE 151+717 Break Point 151+71	.44	493585.97703 493713.95147 493817.08269	420212.90462 420484.23936 420702.90087	
1 2 3	CENTERLINE 151+818 West Edge Intersec East Edge Intersec	tion	493804.94810 493717.36394 493883.96928	420441.32100 420179.22430 420677.79288	
66 61	East Edge Knuckle C.L. Para to edge Break Point 152+06 C.L. 152+069.81	152+069.81	494094.65650 494038.94284 493970.49849 494051.47270	420598.67894 420381.33821 420114.33464 420390.24540	0.000 0.000 0.000 0.000
Assign 7 77 71 70	West Edge Knuckle C.L. Para to edge Break Point 152+81	152+818.07	494718.71876 494787.16348 494842.87588 494784.17002	419922.53249 420189.53749 420406.87330 420238.44355	0.000 0.000 0.000 0.000
Assign 8 88 81 80 List	East Edge Knuckle C.L. Para to edge Break Point 152+91 C.L. 152+913.72	152+913.72	494913.02152 494857.30924 494808.60689 494877.83096	420388.89150 420171.55615 419981.56675 420219.03863	0.000 0.000 0.000 0.000
11 22 33	CENTERLINE 153+040 West Edge Intersec East Edge Intersec	tion	495002.16060 494981.87221 495022.44899	420193.27970 420095.35919 420291.20021	
111	C.L. para edge @ 1	53+040.69	494990.58127	420137.39287	

File: TRENTON.DAT

Session terminated at 2:26 PM on 11-09-1994

TRENTON

SURVEY 4-930609-4-0609 11-01-1994 10:18 AM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\TRNTLALR.DAT

Job: TRENTON & LALOR RANGE INTERSECTION Philadelphia to Trenton

NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 155+04 West Edge Interse East Edge Interse	ection	496965.79830 496938.38009 496993.21651	419786.40940 419689.97127 419882.84753	

File: TRNTLALR.DAT

Session terminated at 10:19 AM on 11-01-1994



SURVEY 4-930609-4-0609 11-01-1994 11:32 AM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\LALRLAND.DAT

Job: LALOR & LANDING INTERSECTION Philadelphia to Trenton NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

By: M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 1 2 3	CENTERLINE 156+01 West Edge Interse East Edge Interse	ction	497879.34780 497835.38082 497923.31478	419453.26050 419362.85010 419543.67090	

File: LALRLAND.DAT

Session terminated at 11:32 AM on 11-01-1994

LALRLAND

SURVEY 4-930609-4-0609 11-01-1994 12:34 PM Page 2

Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\LNDAMRFD.DAT

AMERICAN \ FEDERAL INTERSECTIONS

Job: LANDING \ AMERICAN & Philadelphia to Trenton NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List				·	
1 2 3	CENTERLINE 157+225. West Edge Intersect: East Edge Intersect:	ion	498904.59200 498851.25044 498957.93356	418816.78760 418732.19165 418901.38355	
11 22 33	CENTERLINE 158+481.2 West Edge Intersect: East Edge Intersect:	ion	499962.35470 499910.86944 500013.83996	418139.42220 418053.65187 418225.19253	

File: LNDAMRFD.DAT

Session terminated at 12:35 PM on 11-01-1994

\$ 158× 481.24 200 NOR American \$ 151+225.17 LNDAMRFD 11-01-1994 12:27 PM

SURVEY 4-930609-4-0609 11-01-1994 1:46 PM Page 3

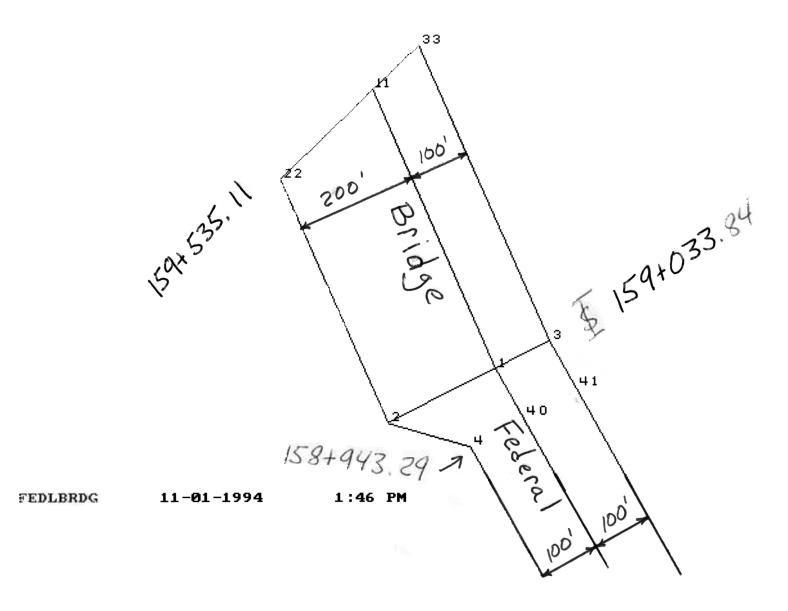
Reg. to: U.S. Army Corps of Engineers
File Name: C:\SIMPLCTY\SURVEYS\FEDLBRDG.DAT

FEDERAL & BRIDGE RANGE INTERSECTION + END OF PROJECT Philadelphia to Trenton NAD 83 Coordinates

N.J. State Plane (2900), U.S. Foot

M.Wallowicz

Point	Direction	Distance	Northing	Easting	Elevation
List 4 40 41	West Edge Knuckle C.L. 158+943.29 Break Point 158+94		500316.27603 500365.23812 500414.20021	417825.99624 417913.18978 418000.38332	
1 2 3	CENTERLINE 159+033 West Edge Intersec East Edge Intersec	tion	500444.19100 500354.50748 500489.03232	417868.85510 417689.84061 417958.36259	
11 22 33	CENTERLINE 159+535 West Edge End of F East Edge End of F	roject	500902.45500 500755.54791 500975.90855	417665.72300 417512.07392 417742.54754	



MAINTENANCE DREDGING

DELAWARE RIVER PHILADELPHIA, PENNSYLVANIA TO TRENTON, NEW JERSEY

PROJECT TABLE OF CONTENTS

TITLE

DIVISION 1 -- GENERAL REQUIREMENTS 01010 Summary of Work 01040 Coordination for Contractor-Furnished Disposal Areas 01060 Safety 01330 Submittal Procedures 01350 Diving Services 01355 Environmental Protection For Dredging Sources for Reference Publications 01420 01450 Contractor Quality Control (CQC) DIVISION 2 -- SITE WORK

02212 Dike Embankment
02230 Clearing and Grubbing
02325 Dredging

DIVISION 5 - METALS
05900 Sluice Boxes and Outflow Pipes

SECTION NO.

(Only Divisions 1, 2 and 5 are used in these specifications.)

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.1 SCOPE

This section presents a general description of the work to be accomplished under this contract in the Delaware River between Philadelphia, Pennsylvania and Trenton, New Jersey.

1.2 DESCRIPTION OF WORK

The contract work consists of, but is not limited to, the dredging of approximately 739,975 C.Y. of material from the Delaware River between Philadelphia and the upper end of Biles Island. Dredging will be performed to the following depths:

- a. -42 feet plus 1 foot allowable overdepth between stations 12+000 and 122+778,
- b. -24 feet plus 1 foot allowable overdepth between stations 122+778 and 124+676,
- c. -22 feet plus one foot allowable overdepth between stations 142 + 000 and 144 + 675
- d. -35 feet plus 1 foot allowable overpepth at the Fairless Turning Basin from station 0+000 to station 0+800. Side slopes will be box cut.

The contract work also includes developments at the following disposal areas:

```
a.Palmyra (No.4),
b.Hawk Island (No.12),
c.Burlington Island (No.22A, No.22B),
d.Money Island (No.26)
e.Biles Island (No.28)
```

Development work to be performed at these disposal areas includes: clearing and grubbing, new sluice boxes, new dikes, and installation of overflow and outfall pipes.

-- End of Section --

SECTION 01040

COORDINATION FOR CONTRACTOR-FURNISHED DISPOSAL AREAS

PART 1 GENERAL

1.1 SUMMARY

This section includes the coordination requirements for any disposal areas furnished by the Contractor. The Contractor has the option of furnishing his own disposal areas for the contract work, subject to the required approvals specified herein, in lieu of the Government-furnished disposal area specified herein. The coordination requirements specified herein also pertain to any rehandling basins proposed for use by the Contractor.

1.2 GENERAL

All expenses incurred in connection with providing and making available such Contractor furnished disposal areas shall be borne by the Contractor, and all material deposited thereon, and all operations in connection therewith shall be entirely at the Contractor's risk.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Federal/State Permits, WQ Certificates, Landowner Permission and Descriptions; G,COR.

The Contractor is required to obtain all applicable Federal and State approvals for Contractor furnished disposal areas. The Contractor shall furnish with his bid, copies of the Federal and State permits obtained, a copy of a State Water Quality Certificate, if required, and written permission from the owners of the properties to be used for the disposal areas and access thereto. Written permission of the owners shall be assigned to the bidder and not to a subcontractor. In the event no approvals are required, the Contractor shall submit documents indicating that agency coordination has taken place. The Contractor shall also complete and submit the "Description of Disposal Areas" form, which is attached to this section.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 REQUIRED COORDINATION

3.1.1 Agency Approval

The Contractor shall coordinate with and submit with his bid written approval from the Federal and applicable state agencies as listed:

a. Federal Agency:

District Engineer U.S. Army Corps of Engineers Philadelphia District Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390

b. State Agencies:

Maryland Department of Natural Resources Tidewater Administration Tawes State Office Bldg. Annapolis, MD 21401

New Jersey Department of Environmental Protection & Energy Division of Coastal Resources CN 401 Trenton, NJ 08625 Delaware Department of Natural Resources & Enviro. Control 89 Kings Highway P.O. Box 1401 Dover, DE 19901

Pennsylvania Department of Environmental Resources P.O. Box 2063 Harrisburg, PA 17105

3.1.2 Water Quality Certificate

Title 33 U.S.C. 1341 requires the acquisition of a Water Quality Certificate from the appropriate state water pollution control agencies to the effect that dredging and operation of any Contractor furnished disposal area will be conducted in a manner which will not violate applicable water quality standards. It is necessary, therefore, that all bids based on the use of such areas be accompanied by a Certificate from the following state agencies:

Maryland Department of the Environment 2500 Broening Hwy. Baltimore, MD 21224

Pennsylvania Department of Environmental Resources 6010 Lee Park 555 North Lane Conshohocken, Pa 19428-2233 New Jersey Department of Environmental Protection Land Use Regulation Program CN 401 501 E. State Street Trenton, NJ 08625

Delaware Department of Natural Resources & Enviro. Control Delaware Coastal Management Program 89 Kings Highway P.O. Box 1401 Dover, DE 19901

3.1.3 Alternate Disposal Area

If, after the award of the contract, a disposal area other than that specified herein is proposed, its acceptance will be subject to the approval of the Contracting Officer after an adjustment of the contract price, if found to be necessary by the Contracting Officer to protect the Government interest. The Contractor shall comply with all requirements for Contractor furnished disposal areas as specified herein. Substitution of disposal areas will be considered as "Value Engineering" within the meaning of the contract clause entitled: "VALUE ENGINEERING - CONSTRUCTION."

3.2 MEASUREMENT AND PAYMENT

See note in Section 00010-3 Bidding Schedule for adjustment of bid price for Contractor-furnished disposal area.

-- End of Section --

DESCRIPTION OF DISPOSAL AREAS

(If other than that stipulated in the Specifications) (To be attached to Bid Form)

ract Drawings may be used.)
cubic yards.
ract Drawings may be used.)
cubic yards.

01040-4

The written permission of all owners of the above substituted areas is attached.

SECTION 01060

SAFETY

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes the development and enforcement of a safety and accident prevention program.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1

(Latest Rev.) Safety and Health Requirements Manual

NOTE: EM 385-1-1 and its changes are available at http://www.hq.usace.army.mil/soh/EM385/385TOC.htm. The Contractor shall be responsible for complying with the current edition and all changes posted on the web as of the effective date of this solicitation.

U.S. ARMY CORPS OF ENGINEERS (PHILADELPHIA DISTRICT)

Liberty from Accidents Program (1996) Philadelphia District Awards Program

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the office indicated prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved or reviewed by, the office indicated prior to commencing the particular task to which the submittal is associated.

SD-01 Preconstruction Submittals

Qualifications; G,DO.

Name and qualifications of the Contractor's proposed safety representative.

Accident Prevention Plan; G,DO.

An accident prevention plan, prepared by the prime Contractor for the specific work, implementing in detail the pertinent requirements of EM 385-1-1 shall be submitted for approval prior to the start of work. A

suggested format for the accident prevention plan is included in EM 385-1-1, Appendix A. The plan shall be prepared for all sites and shall include, but is not limited to, the topic areas listed in Appendix A therein and the requirements of the Paragraph entitled: SAFETY AND HEALTH PROVISIONS. Each topic shall be developed in a concise manner to include management and operational aspects.

The Contractor shall comply with the provisions of EM 381-1-1. If the Contractor is a currently accepted participant in the Dredging Contractors of America(DCA)/United States Army Corps of Engineers(USACE) Dredging Safety Management Program(DSMP), as determined by the DCA/USACE Joint Committee, and holds a current valid Certificate of Compliance for both the Contractor Program and the Dredge(s) to be used to perform the work required under this contract, the Contractor may, in lieu of the submission of an Accident Prevention Plan(APP),

- (1) make available for review, upon request, the Contractor's current Safety Management System(SMS) documentation,
- (2) submit to the Contracting Officer the current valid Company Certificate for its SMS,
- (3) submit the current dredge(s) Certificate of Compliance based on third party audit, and
- (4) submit for review and acceptance, site-specific addenda to the SMS as specified in the solicitation.

SD-07 Certificates

Activity Phase Hazard Analysis Plan; G,DO.

Prior to beginning each major phase of work, an activity hazard analysis (phase plan) shall be prepared by the Contractor for that phase of work and submitted for approval. The suggested format for the analysis is contained in Figure 1-1 of EM 385-1-1. A phase is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform work. The analysis shall address the hazards for each activity performed in the phase and shall present the procedures and safeguards necessary to eliminate the hazards or reduce the risk to an acceptable level.

Safety Meeting Reports.

Outline reports of all weekly and monthly safety meeting shall be submitted.

Accident Reports.

A written report for all accidents utilizing ENG FORM 3394 shall be submitted within 24 hours following such accidents.

OSHA 300 Log.

Contractor's OSHA 300 Log of Injuries shall be submitted monthly.

Floating Plant Inspection; G,DO.

A copy of the annual inspection of all plants, not subject to Coast Guard inspection, shall be submitted prior to start of work.

1.4 GENERAL

Worker safety is of paramount importance. The Contractor shall comply with the Contract Clause entitled: ACCIDENT PREVENTION, EM 385-1-1, the Philadelphia District's Liberty from Accidents Program, and all other requirements as specified herein.

1.5 SITE CONDITIONS

The conditions at the work site require that a lifesaving skiff be manned and immediately available when working over water. All safety equipment shall be in accordance with the requirements of EM 385-1-1.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SAFETY PROGRAM

EM 385-1-1 and all subsequent revisions referred to in the Contract Clause entitled: ACCIDENT PREVENTION of this contract, are hereby supplemented as follows:

- a. The Contractor shall designate an employee to be the safety representative who shall be responsible for safety matters and accident prevention activities. This safety representative shall have no other responsibilities. Such duties shall include: (1) assuring applicable safety requirements are incorporated in work methods and (2) inspecting the work to ensure that daily safety measures and instructions are implemented and documented. The proposed safety representative's name and qualifications shall be submitted in writing for approval by the Contracting Officer. This individual shall have prior experience as a safety representative or be able to demonstrate familiarity and understanding of the safety requirements over a prescribed trial period. The safety representative shall have the authority to act on behalf of the Contractors general management to take whatever action is necessary to assure compliance with safety requirements. The safety representative is required to be on the site when work, of any kind, is being performed, unless otherwise approved by the COR.
- b. Prior to commencement of any work at the job site, a preconstruction safety meeting will be held between the Contractor's safety representative and the Contracting Officer to discuss the Contractor's safety program and to review the Accident Prevention Plan and Activity Phase Hazard Analysis Plan for the first phase of work.
 - c. Subsequent jobsite safety meetings shall be held as follows:
- (1) A safety meeting shall be held at least once a month, documented by the safety representative, with subject and attendees, for all supervisors on the project to review past activities, to plan ahead for new or changed operations and to establish safe working procedures to anticipated hazards. An outline report of each monthly meeting shall be submitted to the Contracting Officer.
- (2) At least one safety meeting shall be conducted weekly, or whenever new crews begin work, by the appropriate field supervisors or foremen for all workers. An outline report of the meeting giving date, time, attendance, subjects discussed and who conducted the meeting shall be prepared and furnished to the Contracting Officer.

3.2 PHILADELPHIA DISTRICT LIBERTY FROM ACCIDENTS PROGRAM

The Philadelphia District Liberty from Accidents Program is hereby incorporated as part of these specifications. The Liberty from Accidents Program rewards Contractors who exceed safety standards. The program provides local and District-wide awards on a quarterly and annual basis.

- a. The Contractor will be evaluated for awards and the final performance evaluation in safety on the frequency rate for the project. The frequency rate is calculated by the following equation: frequency = (number of lost time accidents \times 200,000) divided by the number of man-hours for the project. The Contractor shall have a proactive safety plan as outlined in the Liberty from Accidents Program.
- b. The Contractor evaluation procedure for the safety category shall be as follows:

RATING	CONTRACTOR FREQUENCY RATE
Outstanding	Less than or equal to 0.25.
Above Average	Greater than 0.25 but less than or equal to 0.75.
Satisfactory	Greater than 0.75 but less than or equal to 0.84.
Marginal	Greater than 0.84 but less than or equal to 1.95.

CONTRD A CROD EDECTIENCY DATE

Unsatisfactory Greater than 1.95.

Extenuating circumstances will be considered to change the safety rating in limited situations.

3.3 ACCIDENTS

Chargeable lost time accidents are to be investigated by both the Contractor and the Contracting Officer.

3.3.1 Accident Reporting

סאידייי אים

EM 385-1-1 and the Contract Clause entitled: ACCIDENT PREVENTION are supplemented as follows: The prime Contractor shall report on ENG FORM 3394, provided by the Contracting Officer's Representative, all injuries to employees or to subcontractor employee, and all damage to property and/or equipment. Verbal notification of such accidents shall be made to the Contracting Officer within 8 hours of occurrence. A written report utilizing ENG FORM 3394 shall be submitted to the Contracting Officer within 24 hours following such accidents. The report shall include the following:

- a. A description of the circumstances leading up to the accident, the cause of the accident, and corrective measures taken to prevent recurrence.
- b. A description of the injury and name and location of the medical facility rendering examination and treatment.
- c. A statement as to whether or not the employee was permitted to return to work after examination and treatment by the medical facility, and if not, an estimate or statement of the number of days lost from work. If

there have been days lost from work, the employee must be re-examined and declared fit to resume work as of the date of the report.

3.4 OSHA REQUIREMENTS

3.4.1 OSHA 300 Log

A copy of the Contractor's OSHA 300 Log of Injuries shall be submitted in accordance with the Paragraph entitled: SUBMITTALS.

3.4.2 OSHA Inspections

The Contractor shall immediately notify the Contracting Officer when an OSHA Compliance Official (Federal or State representative) presents credentials and informs the Contractor that the workplace will be inspected for OSHA compliance. The Contractor shall also notify the Contracting Officer upon determination that an exit interview will take place upon completion of the OSHA inspection.

3.5 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes the requirement to complete and maintain a submittal register and describes the procedures to be followed for the submission of submittals.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Review and Complete Submittal Register (ENG Form 4288); G, COR.

Update Submittal Register (ENG Form 4288); G,COR.

1.3 SUBMITTAL IDENTIFICATION (SD)

Submittals required are identified by SD numbers and titles as follows:

- SD-01 Preconstruction Submittals
- SD-02 Shop Drawings
- SD-03 Product Data
- SD-06 Test Reports
- SD-07 Certificates
- SD-11 Closeout Submittals

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.4.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.5 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.6 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.7 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.8 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.9 SUBMITTAL REGISTER

At the end of this section is a submittal register showing items of

equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor shall update and submit the submittal register to the COR at least monthly.

1.10 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 15 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

1.11 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item. The Action Code definitions on reverse side of ENG FORM 4025 shall be augmented as follows:

Code B - Approved, except as noted on the submittal and/or attached sheet. Contractor shall complete all noted actions and address all comments prior to proceeding with those items of work associated with and impacted by the noted actions/comments.

Code C - Conditionally approved, except as noted on the submittal and/or attached sheet. Resubmission and approval are required prior to proceeding with those items of work associated with and impacted by the noted actions/comments. The entire submittal, corrected to comply with the noted actions/comments, must be resubmitted

1.12 SUBMITTAL PROCEDURE

Paragraph (g) of Contract Clause: "Specifications and Drawings for Construction," is modified as specified herein. While submittals referred to in the text may use the wording "submitted to the Contracting Officer", submittals will be reviewed as indicated in column "f" of the Submittal Register (ENG Form 4288). Submittals shall be made as follows:

1.12.1 Submittals for Contracting Officer Representative (COR) Review and For Information Only (FIO)

The Contractor shall submit seven copies of submittals, on the submittal register indicated for Contracting Officer Representative (COR) approval, or, for information only (FIO), to the Contracting Officer Representative.

1.12.2 Submittals for District Office (DO) Review

The Contractor shall submit seven copies of submittals, on the submittal register indicated for the District Office (DO) approval, to the Contracting Officer Representative. The Contracting Officer Representative will forward the submittals to the the District Office (DO) for review. Six

copies will be submitted to the DO and one copy will be retained by the Contracting Officer Representative. The Government will be responsible for all costs incurred in transmitting these submittals.

1.12.3 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.12.4 Completion of Work

Upon completing the work under this contract, the Contractor shall furnish one set of prints of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the items covered by the shop drawings are completed and accepted."

1.13 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.14 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Three (3)copies of the submittal will be retained by the Contracting Officer and remaining copies of the submittal will be returned to the Contractor.

1.15 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.16 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR
(Firm Name)
Approved
Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE:
TITLE:
DATE:

PART 2 PRODUCTS

PART 3 EXECUTION

3.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

FOR USE CODE THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF CHECK ONE: THIS TRANSMITTAL IS FOR FIO GOVT. APPROVAL certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise VARIATION (See instruction NAME AND SIGNATURE OF CONTRACTOR No. 6) ų. TRANSMITTAL NO. TRANSMITTAL FOR CONTRACTOR USE CODE CHECK ONE DATE ġ SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor) DRAWING SHEET NO. CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY CONTRACT NO. NO. OF COPIES DATE Ġ MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) **SECTION II - APPROVAL ACTION** TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE PROJECT TITLE AND LOCATION (Read instructions on the reverse side prior to initiating this form) DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) FROM: (ER 415-1-10) þ. SPECIFICATION SEC. NO. (Cover only one section with ENCLOSURES RETURNED (List by Item No.) each transmittal) REMARKS ITEM NO. æ Ö

INSTRUCTIONS

- Section I will be initiated by the Contractor in the required number of copies.
- number for identifying each submittal. For new submittals or resubmittals mark the appropriatebox; on resubmittals, insert transmittal number of last submission as well as the new submittal number. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial ď
- The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form. რ
- Submittals requiring expeditious handling will be submitted on a separate form. 4.
- Separatetransmittal form will be used for submittals under separate sections of the specifications. 5
- A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks". 6
- Form is self-transmittal, letter of transmittal is not required. ۲.
- When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I. ω.
- U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In <u>ග</u>

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

						۱.						CONTRACT NO	Š.				
			SUBMII I AL REGIS I ER	AL KE	일 일 일	۷											
TITLE Dela	e and awar	TITLE AND LOCATION Delaware River,	TITLE AND LOCATION Delaware River, Phila. to Trenton Maintenance Dredging		0	CONTRACTOR	OR										
					O.	SCH	CONTRACTOR: SCHEDULE DATES		CONTF AC	CONTRACTOR ACTION		APPF	APPROVING AUTHORITY	TORITY	,		
<∪⊢->-⊢> ZO	⊢α∢ΖωΣ-⊢⊢∢¬ ZO	отшо ошон	P A A A B B B B B B B B B B B B B B B B	U J 4 0 00 - L - O 4 F - O Z	O>⊢ O∝ ∢~ш ∝ш>≷∝	SUBMIT	APPROVAL P NEEDED BY	MATERIAL NEEDED BY	∢∪⊢-OZ ∪OQШ	DATE I OF	DATE FWD TO APPR AUTH DATE RCD IF FROM	DATE FWD IT TO OTHER F	DATE RCD FROM OTH REVIEWER	∢O⊢-OZ OOD⊞	DATE DOF F	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(q)	(0)	(e) (p)		(f)	(b)	(h)	(i)	(j)	(k)	(2)	(m)	(u)	(0)	(d)	(b)	(.)
		00200	SD-01 Preconstruction Submittals						Н					Н			
			Payroll Basic Records &	0 0	G COR												
T			Statements of Compliance						+					+			
	Ţ		Affirmative Action Compliance	5	GCOR				+					+			
			Plan						+					+			
T	\prod		Dredging Progress Schedule	G COR	S S				+					+			
T	\prod		一	<u>-</u>	8				\dagger					+			
T	\prod	00800	쒸						\dashv					+			
T			Copy of Request to USCG for	잂					\dagger					+			
T	\prod		Notice to Mariners						+					+			
T			Copy of Request to USCG for	잂					\dashv					+			
			Movement of Navigation Aids						+					+			
			Placing Submerged Pipelines	2					\perp								
			Across Channel														
			Evidence of Insurance	FIO													
		01040	SD-07 Certificates														
			Federal/State Permits, WQ	G COR	OR												
			Certificates, Landowner Permission														
			and Descriptions														
		01060	SD-01 Preconstruction Submittals														
			Qualifications		8												
			Accident Prevention Plan	ŋ	00				\dashv					\dashv			
			SD-07 Certificates						\dashv					\dashv			
T			Activity Phase Hazard Analysis	<u>ნ</u>	00				\dashv					\dashv			
			Plan						_								

PAGE 1 OF 4 PAGES

			SUBMI	TTAL	SUBMITTAL REGISTER	 						CONTRACT NO	O				
TITLE Del	: AND I	TITLE AND LOCATION	TITLE AND LOCATION Delaware River. Phila, to Trenton Maintenance Dredging			CONTRACTOR	TOR										
					O	SC	CONTRACTOR: SCHEDULE DATES		CONTR	CONTRACTOR		APPR	APPROVING AUTHORITY	IORITY			
∢∪⊢->-⊢> ZO	⊢α∢ΣωΣ-⊢⊢∢¬ ZO	оешО ошО⊢	DESCRIPTION ITEM SUBMITTED	₽< K < Q K < ₽ I #	O>⊢ O∝ <>ш ∝ш>≷«	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	∢∪⊢-OZ ∪ООШ	DATE COP	DATE FWD TO APPR AUTH/ DATE RCD D FROM T	DATE FWD C TO OTHER F REVIEWER R	DATE RCD C FROM OTH I	40F-0Z 00m	DATE DV ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(q)	(0)	(p)	(e)	(J)	(B)	(h)	(i)	(j)	3	€	(m)	(u)	(0)	(d)	(b)	(r)
		01060	Safety Meeting Reports		FIO				Н					Н			
T			Accident Reports		FIO				+					_			
			OSHA 300 Log		FIO				+				\dagger	+	+		
		0000	Floating Plant Inspection		กก อ				$^{+}$					+		+	
	Ι	01330	SD-07 Certificates Review and Complete Submittal		S C C				+					+			
			Register (ENG Form 4288)														
			Update Submittal Register (ENG		G COR												
			Form 4288)														
		01350	SD-07 Certificates						\dashv								
			Diving Plan		*				\dashv								
			Diving Operations Manual		*				_								
			Air Quality Certifications		*				_					_			
			Daily Logs		FIO				+					_			
		01355	SD-01 Preconstruction Submittals						\dashv					+			
			Location of Storage Facilities		G COR				+								
			SD-07 Certificates						\dashv								
			Environmental Protection Plan		G COR												
			Government Observer		G COR												
			Accommodations Plan														
			Soil Erosion and Sediment Control		G COR												
			Plan														
		01450	SD-07 Certificates														
			Final Quality Control Plan		G COR												
			Interim Quality Control Plan		G COR				Н					Н			
														_			

PAGE 2 OF 4 PAGES

												CONTRACT NO	Q				
				TTAL	SUBMITTAL REGISTER	 											
Del	E AND awar	TITLE AND LOCATION Delaware River,	TITLE AND LOCATION Delaware River, Phila. to Trenton Maintenance Dredging	Ę		CONTRACTOR	TOR										
					9	SS	CONTRACTOR: SCHEDULE DATES		CONT	CONTRACTOR ACTION		APPF	APPROVING AUTHORITY	HORIT	>		
∢∪⊢->-⊢> ZO	⊢α∢ΣωΣ-⊢⊢∢¬ ZO	одшо ошо⊢	DESCRIPTION ITEM SUBMITTED	₽ 4 K 4 Q K 4 ₽ I #	O>⊢ O∝ <\m ∝m>≥≈	SUBMIT	APPROVAL I NEEDED BY	MATERIAL NEEDED BY	∢0⊢-0z 000ш	DATE I OF	DATE FWD TO APPR AUTH/ DATE RCD [FROM]	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	40⊢-0z 000m	DATE DOF F	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(q)	(0)	(p)	(e)	(J)	(b)	(h)	(i)	Ĵ	(k)	(1)	(m)	(u)	(0)	(d)	(b)	(2)
		01450			G COR				H					H			
			to the Quality Control Plan						\dashv					\dashv			
			SD-11 Closeout Submittals						\dashv					\dashv			
	\prod		一		G COR				\dagger					+			
		02212	쒸						\dashv					\dashv			
			Work Plan		G COR				\dashv					\dashv			
			SD-02 Shop Drawings						\dashv					\dashv			
			Record Drawings		G COR				\dashv					\dashv			
			SD-03 Product Data						\dashv					\dashv			
			Surveys		G COR												
			SD-06 Test Reports														
			Field Moisture Tests		G COR				\dashv					\dashv			
	\prod		SD-07 Certificates						\dashv					\dashv			
	1		Silt Fence		G COR				\dashv					\dashv			
	\prod		一		G COR				\dashv					\dashv			
	1	02325	쒸						\dashv					\dashv			
			Pumpout Plan		G COR												
			Disposal Area Plan		G COR												
			Discharge Pipe Support Plan		G COR												
			SD-03 Product Data														
			Vessel and Equipment List		G COR												
			SD-06 Test Reports														
			Daily Report of Operations		G COR												
			DGPS Positioning		FIO				\dashv					\dashv			
	\Box		Disposal Area Effluent		FIO			1	\forall				+	\dashv			
			Measurements						_								

PAGE 3 OF 4 PAGES

			SUBM	MITTAL	SUBMITTAL REGISTER	 						CONTRACT NO	.O.				
TITLI Del	E AND awar	TITLE AND LOCATION Delaware River,	TITLE AND LOCATION Delaware River, Phila. to Trenton Maintenance Dredging	ug		CONTRACTOR	TOR				1						
					()	SS	CONTRACTOR: SCHEDULE DATES		CONT	CONTRACTOR		APPR	APPROVING AUTHORITY	HORIT	>		
∢∪⊢->-⊢> ZO	⊢α∢ΣωΣ-⊢⊢∢¬ ZO	одшО ошО⊢	DESCRIPTION ITEM SUBMITTED	₽ < C < Q C < P I #	O>⊢ O∝ ∢~m ~m>≥«	SUBMIT	APPROVAL I NEEDED BY	MATERIAL NEEDED BY	40H-0Z 000m	DATE (COP	DATE FWD TO APPR AUTH/ DATE RCD D FROM T	DATE FWD D TO OTHER FI REVIEWER RI	DATE RCD (FROM OTH I	∢O⊢-OZ OOO⊞	DATE DO PER	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(q)	(0)	(p)	(e)	(j)	(b)	æ	(=)	(Đ	(K	(1)	(m)	(u)	(o)	(d)	(b)	(J)
	Ц	02325	SD-07 Certificates						H					H			
			Timber-Flash Boards		G COR				+								
	\prod		Plans for contractor-furnished		G COR				\dashv					\dashv			
			rehandling basin						\dagger				+	+			
		02800	SD-01 Preconstruction Submittals						\dagger				+	+			
			Sluice Box and Outflow Pipe		G COR				\dagger					+			
			Workplan						\dagger					\dashv			
			SD-07 Certificates						\dashv					\dashv			
			Outflow Pipe		G COR												
			Structural Steel		G COR												
			Quality Assurance for Welders		G COR												
	_								\dashv					\dashv			
									+								
									\dashv					\dashv			
									\dashv					\dashv			
									\dagger					+			
									\dashv					+			
	_]								\dashv					\dashv			
	_								\dashv					\dashv			
									\dashv					\dashv			
									\dashv					\dashv			
	\rfloor								\dashv				\dashv	\dashv	\exists		

SECTION 01350

DIVING SERVICES

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work specified in this section includes the development and enforcement of a diving services plan.

NOTE: Though diving services are not required as part of the general scope of work for this project, it is Philadelphia District policy to include a section covering commercial diving operations for all construction projects that are conducted on, or near, the water. The reasoning for this is the fact that unforeseen circumstances (such as lost equipment recovery, unknown sunken object investigation/removal, etc.) may require the need for commercial diving services. In the event the need for this type of operation occurs, including a commercial diving section in the contract specifications helps to ensure that the Contractor is aware of the requirements for conducting commercial diving operations on USACE Philadelphia District projects.

1.2 GENERAL REQUIREMENTS

All diving performed under this contract shall be in strict accordance with the rules and regulations prescribed by the U.S. Navy Diving Manual: 0910-LP-708-8000; 29 CFR Part 1910, Subpart T; 29 CFR Part 1915; the EM 385-1-1, Section 30; and ER 385-1-86, except as modified below. A Contracting Officer's Representative, will be designated by the Contracting Officer at the Post Award Conference, to act for the Contracting Officer for all submissions, directions and/or acceptance(s) required under the specifications. There will also be an individual designated as the District Dive Coordinator.

1.3 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (Latest Rev.) Safety and Health Requirements Manual

ER 385-1-86 (July 1994) Engineer Regulation,
Government Personnel Diving Operations

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR Part 1910 (1999) Occupational Safety and Health Standards

29 CFR Part 1915 (1999) Safety and Health Standards
Applicable to Shipyard Employment

NAVAL SEA SYSTEMS COMMAND (NSSC)

0910-LP-708-8000

(Jan 1999) U.S. Navy Diving Manual, Revision 4

1.4 SUBMITTALS

NOTE: The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES. These submittals are for Government acceptance. The COR may require resubmittal of these submittals if deemed necessary.

SD-07 Certificates

Diving Plan.

Submit, for review, at least 10 days prior to operations, a Project/Task Specific Dive Plan prior to performing any actual dive task or assignment. Each separate Dive Plan will require review and acceptance by the Contracting Officer's Representative prior to commencing any diving required under this contract. A typical Dive Plan (the Contractor may prepare a form with the appropriate subject/item already listed with blank spaces to be filled in as required for each Dive Plan submitted) shall include the following information as a minimum:

- a. Dive Plan for: (project and specific tasks).
- b. Name of Contractor (and at least 2 diving subcontractor if required).
- c. Contract Number.
- d. Date of Dive Plan submission.
- e. Name of diving supervisor preparing the Dive Plan.
- f. Description of proposed work and diving mission.
- g. Approximate time and date dive mission will start.
- h. Listing of diving equipment to be used.
- i. Name or type of diving platform to be used.
- j. Planned depth of dive and maximum depth to bottom.
- k. Maximum single dive bottom time for the planned depth of dive for each diver.
- 1. Surface and underwater conditions , to include visibility, temperature, thermal protection, and currents.
- $\ensuremath{\mathtt{m}}.$ Lockout/Tagout procedures, including procedures for dealing with differential pressures.
- n. Listing of special tools or equipment to be used.
- o. Materials to be handled or installed.

- p. Listing by name each member of the diving team. The first time each diver is employed on the job, the Contractor shall attach to the diver plan a qualification statement and copy of the diver's current medical record, giving the physician's written report and opinion of the diver's fitness for exposure to hyperbaric conditions, including any limitations to such exposure. The required qualifications statement and current medical report shall be in accordance with EM 385-1-1. Diver's qualification statement and medical record need not be attached to subsequent Dive Plans unless a diver's medical report has expired and a new medical report has been submitted.
- q. Listing by name each person directly involved in topside assistance/support to the dive team.
- r. Listing of information and equipment required at the dive site. The following information and work materials shall be available at the dive site, either referenced in the Diving Operations Manual or work materials furnished by the Contractor: U. S. Navy Standard Air Decompression Table; Diving Log Sheets; Repetitive Dive Worksheets; Table of No-Decompression Air Dives; means of direct emergency communications between the dive site and the Contractor's project office, the Dive Coordinator/Dive Inspector; stop watch or equivalent, as required to monitor times for each diver; standard first aid supplies; litter or tilt board and a manual resuscitator capable of administering oxygen; portable VHF marine band radio as required to communicate with vessel traffic.
- s. Listing of information required at the dive site and the project office; local emergency medical assistance names, locations, and telephone numbers for ambulance service, hospital, and doctor, emergency medical evacuation assistance for ground and/or air transportation facilities with point of contact names, locations and telephone numbers; nearest emergency medical facility with hyperbaric chamber capable of recompression equivalent to 165 feet of water, with point of contact names, location and telephone numbers.
- t. The Diving Plan shall contain the following statement: "If for any reason the diving plan, as accepted, is altered in scope of mission, depth, personnel, or equipment, the Philadelphia District Diving Coordinator shall be contacted in order to review the proposed diving plan revision prior to the actual diving operation." (24 Hrs).

Diving Operations Manual.

Submit, for review, at least 15 days prior to operations, a Diving Operations Manual, which shall depict the Contractor's general plan for accomplishing the diving operations required under this contract. The Diving Operations Manual shall be reviewed by the Contracting Officer's Representative prior to commencing of any diving operations under this contract. The Diving Operations Manual shall include the following information as a minimum:

- a. A complete copy of 29 CFR Part 1910, Subpart T, and the Contractor's proposed method of complying with each of its pertinent parts.
- b. U. S. Navy Standard Air Decompression Table.
- c. A sample of the Diving Log sheets to be used under this contract.

- d. A sample of the Repetitive Dive Worksheets or equivalent (dive profile method) to be used under this contract.
- e. U. S. Navy Table of No-Decompression Limits and Repetitive Group Designation for No-Decompression Air Dives.
- f. U. S. Navy Residual Nitrogen Timetable for Repetitive Air Dives.
- g. An outline of emergency communications between the dive site and the Contractor's project office (located at the job site); Contractor-furnished portable radios, hardware, telephone hookup, etc.
- h. Emergency assistance information, including location, telephone numbers, and names of nearest doctor, hospital, emergency ground and air transportation, recompression facilities, and other appropriate medical assistance.
- i. An Activity Hazard Analysis Plan, setting forth potential hazards, means of prevention, and actions to be taken should an accident involving the potential hazard occur. Minimum coverage in the Activity Hazard Analysis Plan shall include; means of prevention and procedures for dealing with fire, equipment failure, and adverse environmental conditions, drowning, air embolism, decompression sickness, traumatic injury, hypoxia, carbon dioxide excess, carbon monoxide excess, strangulation, various type of squeezing, fouling or entanglement, mechanical injury, overexertion/exhaustion, hypothermia, hyperthermia, currents caused by hydraulic differential through the structure, and electrocution and blowup if dry suits are used.
- j. An outline of pre-dive briefings and equipment checkout procedures for daily diving activities under this contract.
- k. An outline of qualifications and experience requirements for the dive team members, required under this contract. As a minimum, each team member shall have at least one (1) year of commercial experience in the applicable position; divers shall have completed at least four (4) working dives to the depths required by this contract, using the particular diving techniques and equipment to be used under this contract. Divers shall demonstrate that at least one (1) of the four (4) qualification dives was performed in the last six (6) months prior to the contract award date.
- l. An outline of the medical qualifications required for divers to be employed under this contract. As a minimum, each diver shall meet the certification requirements specified in 29 CFR Part 1910, Subpart T, and EM 385-1-1, Section 30.
- m. An outline of diving equipment, maintenance procedures and certification of analysis of air output for diving air supply compressors to be used under this contract. As a minimum, the equipment maintenance procedures shall indicate method of testing, frequency, and repair methods used. Diving air supply compressors' output air shall be in conformance with the following limits: oxygen 20 to 22 percent by volume, carbon dioxide 1,000 ppm maximum, carbon monoxide 20 ppm maximum, total hydrocarbons 25 ppm maximum, particulates 5 mg/cubic meter maximum, and have no objectionable odor.
- n. An outline of administrative and record-keeping procedures. As a minimum, the outline shall contain (by title of position) job

responsibilities, the chain of command, daily briefing and diving safety orientation procedures, log and diving-related record-keeping responsibilities, equipment maintenance and pre-dive equipment checklist, etc.

Air Quality Certifications.

Submit, for review, at least 10 days prior to any diving operations, Air Quality Certifications for accomplishing the diving operations required under this contract, in conformance with the limits stated in the above paragraph n, of the Diving Operations Manual. The Air Quality Certifications shall be reviewed by the Contracting Officer's Representative prior to commencing of any diving operations under this contract.

Daily Logs.

Submit each day, to the Contracting Officer/District Dive Coordinator fully completed copies of the previous day's Diving Log Sheets and any other work sheets prepared in conjunction with the Diving Log Sheets.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 RESTRICTIONS

Only surface air-supplied diving within the No-Decompression Limits, using the previously cited U. S. Navy Diving Tables, will be permitted under this contract, unless otherwise accepted by the Contracting Officer. Any deviation from or modification to the U. S. Navy Diving Tables, proposed by the Contractor, shall be submitted at the time the Diving Operations Manual is submitted, with any such deviation or modification clearly identified for review purposes.

3.2 DOCUMENTS AVAILABILITY

One (1) copy of the accepted Diving Operations Manual (to be kept in D.O.) and one (1) copy of the appropriate accepted Diving Plan shall be available at the dive site while diving operations are underway.

3.3 COORDINATION

All diving activities shall be conducted with full knowledge and close coordination with the Contracting Officer and Dive Coordinator. Divers shall not enter the water or move from prescribed location without the acceptance of the Dive Inspector or Dive Coordinator.

3.4 PRE-DIVE CHECK

Prior to the dive and at the scene of the dive, the Contractor will meet with the USACE diving inspector and shall insure, as a minimum, the following pre-dive checks are performed:

a. Breathing air tanks contain sufficient air supply to perform the required work, i.e., standby air tanks are on site and full to the capacity (3,000 psi). A pressure reading shall be taken to insure that

approximately 3,000 psi of breathing air is contained.

- b. All diving equipment shall be checked for proper function prior to diver entry.
- c. All necessary safety equipment specified hereinbefore are on site and functioning properly.
- d. Lockout/tagout procedures are followed and the diving supervisor is in possession of the key or keys.
- e. Crane signals are reviewed and radio communications with the crane operator is functioning properly, when applicable.
- f. Welding or cutting procedures are clearly reviewed, the proper welder polarity is set and precautions have been taken to insure that electrocution will not occur.
- g. A pre-dive briefing shall be given which includes but is not limited to, the accident management plan, activity hazards analysis, equipment check list, diving logs, diving conditions, and diving procedures.

3.5 DIVE TEAM CREW REQUIREMENTS

The following dive team members are required as the minimum crew manning levels:

Comply with EM 385-1-1, Appendix N, Table III.

3.5.1 Surface-Supplied Air Mode

All working dives requiring communications between the Divers and topside to direct crane load movements, etc., shall be performed in surface-supplied air mode. The minimum crew manning level consists of the In-water Diver, Stand-by Diver, Diver Tender, and Dive Supervisor. A member of the crew shall be responsible for radio communications and timekeeping. Surface-supplied air gear shall include hardwire communications and a diver carried air reserve.

3.6 MEASUREMENT AND PAYMENT

The work specified in this section will not be measured for payment and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

SECTION 01355

ENVIRONMENTAL PROTECTION: DREDGING

PART 1 GENERAL

1.1 SUMMARY

This section covers the furnishing of all labor, material and equipment and performing all work required for the protection of the environment during dredging and disposal operations except, for those measures set forth in other sections of these specifications.

1.2 REFERENCES (Not Applicable)

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the office indicated prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved or reviewed by, the office indicated prior to commencing the particular task to which the submittal is associated.

SD-01 Preconstruction Submittals

Location of Storage Facilities; G, COR.

Plans showing storage and other construction facilities shall be submitted for approval of the Contracting Officer.

SD-07 Certificates

Environmental Protection Plan; G, COR.

Prior to commencement of the work, the Contractor shall submit to the Contracting Officer for approval his proposed environmental protection plan. This shall be followed by a meeting with representatives of the Contracting Officer to develop mutual understandings relative to compliance with this provision and administration of the environmental protection program. Approval of the Contractor's plan for environmental protection will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants.

Government Observer Accommodations Plan; G, COR.

Prior to commencement of dredging work, the Contractor shall submit to the Contracting Officer for approval his proposed Government observer accommodations plan.

Soil Erosion and Sediment Control Plan; G, COR.

The Contractor shall prepare and submit to the County Soil Conservation District for certification, a Soil Erosion and Sediment Control Plan. Three copies of the approved Soil Erosion and Sediment Control Plan shall be submitted to the Contracting Officer prior to the commencement of work.

1.4 DEFINITION OF ENVIRONMENTAL PROTECTION

For the purpose of this specification, environmental protection is defined as the retention of the environment in its natural state to the greatest extent possible during dredging and disposal operations and to enhance the natural appearance in its final condition. Environmental protection requires consideration of air, water, and land resources and involves noise, solid waste-management and management of other pollutants. In order to prevent, and to provide for abatement and control of any environmental pollution arising from the dredging and disposal activities in performance of this contract, the Contractor and his subcontractors shall comply with all applicable Federal, state, and local laws and regulations and shall obtain all necessary permits required by same.

1.5 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any non-compliance with the aforementioned Federal, state, or local laws or regulations. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. The Contractor shall, after receipt of such notice, immediately inform the Contracting Officer of proposed corrective action and take such action as may be approved. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made subject of a claim for extension of time or for excess costs or damages by the Contractor.

1.6 SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 PROTECTION OF LAND RESOURCES

3.1.1 General

The land resources within the disposal area boundaries and outside the limits of work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of dredging that will appear to be natural and not detract from the appearance of the area. The Contractor shall confine his disposal activities to areas defined by the plans and specifications or to Contractor furnished disposal areas as approved by the Contracting Officer. The following additional requirements are intended to supplement the requirements of the Contract Clauses.

3.1.2 Prevention of Landscape Defacement

Except in areas indicated on the plans or specified to be cleared, the Contractor shall not deface, injure, or destroy trees or shrubs, nor remove or cut them without the authority of the Contracting Officer. Ropes, cables, or guys shall not be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized. Where such special emergency use is permitted, it shall be performed in such a manner as to avoid damage to the trees. The Contractor shall in any event be responsible for any damage resulting from such use. Where the possibility exists that trees may be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or operations, the Contractor shall adequately protect such trees. Stone, earth or other material that is displaced into uncleared areas shall be removed. Monuments and markers shall be protected before construction operations commence.

3.1.3 Restoration of Landscape Damage

Any tree, turfed areas or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored to a condition satisfactory to the Contracting Officer. Restoration of scarred and damaged trees shall be performed in an approved manner by experienced workmen. Trees damaged beyond restoration shall be removed and disposed of off-site at the Contractor's expense. Trees that are to be removed because of damage shall be replaced at the Contractor's expense by nursery-grown trees of the same species or a species approved by the Contracting Officer. The size and quality of nursery-grown trees shall also be approved by the Contracting Officer. Any disturbed turfed (grassed) areas shall be seeded and mulched as directed by the Contracting Officer.

3.1.4 Location of Storage Facilities

Contractor's storage and other construction buildings, which are required in the performance of the work, shall be located upon cleared portions of the job site and shall require the written approval of the Contracting Officer. The preservation of the landscape shall be an imperative consideration in the selection of all sites and in the construction of buildings. Where buildings or platforms are constructed on side hills, the Contracting Officer may require cribbing to be used to obtain level foundations. Benching or leveling of earth may be permitted, depending on the location of the proposed facility.

3.1.5 Post Construction Cleanup or Obliteration

The Contractor shall obliterate all signs of temporary construction facilities, excess materials, or any other vestiges of construction as directed by the Contracting Officer. The area will be restored to near natural conditions which will permit the growth of vegetation thereon.

3.2 RECORDING AND PRESERVING HISTORICAL AND ARCHAEOLOGICAL FINDS

All items having any apparent historical or archaeological interest which are discovered in the course of any dredging and disposal activities shall be carefully preserved. The Contractor shall leave the archaeological find undisturbed and shall immediately report the find to the Contracting Officer so that proper authorities may be notified.

3.3 PROTECTION OF WATER RESOURCES

3.3.1 General

The Contractor shall not pollute any streams, rivers or waterways with fuels, oils, bitumens, calcium chloride, acids, insecticides, herbicides or other harmful materials. The Contractor shall investigate and comply with all applicable Federal, state, county, and municipal laws concerning pollution of rivers and streams.

3.3.2 Disposal

Disposal of any debris resulting from the contract work and any wastes, effluents, trash, garbage, oil, grease, chemicals, etc., in or adjacent to the work area will not be permitted. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to its original condition. If necessary, contaminated ground shall be excavated, disposed of as directed by the Contracting Officer, replaced with suitable fill material, compacted and finished with topsoil, and planted as required to reestablish vegetation.

3.4 PROTECTION OF FISH AND WILDLIFE

3.4.1 General

The Contractor shall at all times perform all work and take such steps required to minimize interference with or disturbance to fish and wildlife. The Contractor will not be permitted to alter water flows or otherwise disturb native habitat adjacent to any disposal area which, in the opinion of the Contracting Officer, are critical to fish and wildlife.

3.5 PROTECTION OF ENDANGERED AND THREATENED SPECIES

REASONABLE AND PRUDENT MEASURES

The NMFS believes the following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take of shortnose sturgeon.:

- 1. Hopper dredges shall be outfitted (i.e., with state-of-the-art deflectors on the draghead) and operated in a manner (i.e., relative to reducing dredge RPMs when the draghead is not on the sediment surface) that will reduce the risk of interaction with shortnose sturgeon or sea turtles.
- 2. Hydraulic dredges shall be equipped and operated d to maximize endangered species observers' ability to detect sturgeon or sea turtle parts and in resuscitating turtles injured by dredging activity. Full cooperation with the endangered species observer program is essential for compliance with the terms and conditions of the Incidental Take Statement.
- 3. If hopper dredge is used to perform maintenance dredging in Delaware Bay between June and November 30, the Contractor, in this permit issuance, must adhere to the requirements specified in Appendix A-Page 01355-9: "Equipment Specifications," "Observer Protocol", and "NMFS Observer Guidelines".

TERMS AND CONDITIONS

The Contractor must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

- 1. NMFS-approved observers will be required on hopper dredges to monitor the hopper spoil, overflow, screening, and dragheads for shortnose sturgeon, and their remains. The contractor shall consult Appendix A-page 01355-9 for a list of observer qualifications and training requirements. Observers shall be aboard the dredges for a minimum of 25% coverage of all screened material. Coverage may be increased if the take limit is approached.
- 2. Hopper dredges shall be equipped with screening or basket to better monitor the intake and overflow of the dredged materials for sturgeon and their remains. These screens shall sample at least 70% of the overflow area and shall be installed at the applicable area(i.e., the "skimmer funnel" and the starboard and port sides of the vessels, etc.) Every effort shall be made to effectively sample for sturgeon parts that may travel through the hopper and exit in the overflow material.
- 3. A daily reporting form(Appendix E)-page 01355-16 shall be completed by the dredge observer, being sure to note any significant biological material(i.e., sturgeon, or parts) or protected species sightings. Copies of the daily reports shall be sent weekly to the NMFS during project operations. A final report summarizing the results of the dredging and any sturgeon take must be submitted to the NMFS within 30 working days of completion of each maintenance dredging project. Shortnose sturgeon/dredge interaction report form (Appendice B(I))-page 14 shall be submitted to NMFS within 3 working days of an actual take. Unless otherwise notified by the NMFS' Northeast Regional Office, all reports shall be sent to: Mary Colligan, NMFS, Protected Resources Division, One Blackburn Drive, Gloucester, MA 01930 (Fax number: 978-281-9394)
- 4. Observers shall consult Appendice B(II)-page 01355-15 for instruction on shortnose sturgeon sampling and disposition requirements. Stranding network contacts listed in Appendix A-page 01355-9 shall be notified of the availability of any carcasses for sampling or retrieval. Sea turtle carcasses may require shipment if practicable.
- 5. If the take of shortnose sturgeon approaches 75% of the permitted incidental take level(i.e., 3 animals) during any project cycle, the contractor shall immediately contact NMFS at (978)281-9116, to review the situation and determine if any new management measures shall be implemented to prevent the total incidental take level from being reached.
- 6. If a cutterhead pipeline dredge is used in the Kinkora to Trenton Range of the Delaware river, daily inspections of the disposal site must be made to look for evidence of entrained shortnose sturgeon. If pipeline dredge is used in the Kinkora to Trenton range of the Delaware river during November and December, weekly inspections must be made of the spoil pile to look for evidence of entrained shortnose sturgeon. Weekly reports should be submitted to PDO documenting compliance.
- 7. If hopper dredge dredging occurs in Delaware Bay between April and November 30, the hopper dredge must be equipped with rigid deflectors draghead as designed by WES, or if that is unavailable, a rigid deflector attached to the draghead. Deflectors shall be checked and/or adjusted by a designated expert prior to a dredge operation to ensure proper installment and operation during dredging. The deflector shall be checked periodically through the dredge operation to ensure that proper installation is maintained. Since operator skill is important to the effectiveness of the new WES developed draghead, operators must be properly instructed in its

use.

8. The Contractor shall ensure that all contracted personnel involved in project operations review this Incidental Take Statement and are aware of the requirements and restrictions contained herein.

The NMFS believes that, annually, no more than four (4) shortnose sturgeon will be incidentally taken as a result of dredging operations in the Philadelphia District. The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the dredging activities. If, during the course of these actions, this level of incidental take is exceeded, such incidental take represents new information requiring review of the reasonable and prudent measure provided. The contractor must immediately provide an explanation of the causes of the taking and review with NMFS the need for possible modification of the reasonable and prudent measures.

3.6 SOIL EROSION AND SEDIMENT CONTROL

3.6.1 Soil Erosion and Sediment Control Plan

The Contractor must prepare a Soil Erosion and Sediment Control Plan and apply for a certificate for the development of all disposal areas located in the State of New Jersey. The Contractor shall conduct his operations in conformance with his certified Soil Erosion and Sediment Control Plan. Surface drainage from cuts and fills within the limits of the work shall be held in suitable sedimentation ponds or shall be graded to control erosion within acceptable limits. Temporary erosion and sediment control measures shall be provided and maintained until the permanent work is completed and operative. The area of bare soil exposed at any given time by construction shall be restricted to a minimum. Fills and waste areas shall be constructed by selective placement of materials to eliminate silts or clays on the surface which may erode and contaminate the adjacent waterway. The Contractor shall comply with all applicable laws concerning soil erosion and sediment control.

3.6.2 General Soil Erosion and Sediment Control Requirements

Surface drainage from cuts and fills within the limits of the work shall be held in suitable sedimentation ponds or shall be graded to control erosion within acceptable limits. Temporary erosion and sediment control measures shall be provided and maintained until the permanent work is completed and operative. The area of bare soil exposed at any given time by construction shall be restricted to a minimum. Fills and waste areas shall be constructed by selective placement of materials to eliminate silts or clays on the surface which may erode and contaminate the adjacent waterway. The Contractor shall comply with all applicable laws concerning soil erosion and sediment control.

3.7 DISPOSAL OF DEBRIS

All debris resulting from dredging operations shall be removed from the disposal area sites, as directed by the Contracting Officer, and disposed of at the Contractor's expense. Such disposal shall comply with all applicable Federal, state, and local laws. Such materials shall be removed from the disposal area sites before the date of completion of the work under these specifications.

3.8 MAINTENANCE OF POLLUTION, EROSION AND SEDIMENTATION CONTROL FACILITIES DURING CONSTRUCTION

During the life of this contract, the Contractor shall maintain all facilities constructed for pollution, erosion and sedimentation control under this contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created. During the contract period, the Contractor shall conduct frequent training sessions on environmental protection. The curricula should include methods of detecting and avoiding pollution; familiarity with pollution standards, both statutory and contractual; and installation and care of vegetative covers, plants and other facilities to prevent and correct environmental pollution.

3.9 MEASUREMENT AND PAYMENT

3.9.1 Environmental Protection

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

APPENDIX A

Monitoring/Observer Specifications

I. Equipment Specifications:

- A. Baskets or screening must be installed over either the hopper inflows or overflows with openings of approximately 4 inches by 4 inches to provide 100% coverage of all dredged material and shall remain in place during all dredging operations between June 1 and November 30 of any calendar year.
- B. Suction pumps on the dredge should not be activated until the dragheads are in the sediment, and will be turned off before the dragheads are raised.
- C. Floodlights must be installed to allow the NMFS-approved observer to safely observe and monitor the baskets or screens.
- D. Sufficient time must be allotted between each dredging cycle for the NMFS-approved observer to inspect the baskets and screens for sea turtles and/or turtle parts and document the findings.

II. Observer Protocol:

- A. A NMFS-approved observer with demonstrated ability to identify sea turtle species and marine mammals must be placed aboard the dredge(s) being used; starting immediately upon project commencement to monitor for the presence of sea turtles and/or sea turtle parts being pulled into the hopper during dredging operations and marine mammals in the vicinity of dredge and disposal operations.
- B. One NMFS-approved observer is to be onboard for the first week of dredging and subsequent shifts would proceed one week on and one week off duty until project completion or mid-November, whichever comes first. While onboard, observers shall provide the required inspection coverage on a rotating basis of six hours on and six hours off each day. Combined monitoring periods would then represent 50% of total dredging time through one dredging cycle with 25% of total dredging time having been monitored by observers. Observer data will be evaluated after the first cycle of dredging to determine if monitoring is necessary for the next cycle of dredging (not to be confused with loading cycle).

- C. During the required inspection coverage, the trained sea turtle/marine mammal NMFS-approved observer shall inspect the galvanized screens at the completion of each loading cycle for sea turtles or sea turtle parts. Observation sheets and major incident reports shall be prepared by the observer using a format approved by NMFS (copy attached). The observation sheet shall be completed for each loading cycle, whether sea turtles/marine mammals are present or not. Weekly reports including all completed load sheets and relevant incident reports, as well as a final report, are to be submitted to the attention of Mary Colligan, NMFS, Habitat and Protected Resources Division, One Blackburn Drive, Gloucester, Massachusetts 01930, and the Regulatory Branch of the Philadelphia Corps of Engineers within 7 days of completion of each observation period.
- D. For each sighting of an endangered or threatened marine species, record the following information (the attached "Daily Whale Reporting Form" can be used for marine mammals):
 - 1. Date, time, coordinates of vessel
 - 2. Visibility, weather, seastate
 - 3. Vector of sighting (distance, bearing)
 - 4. Duration of sighting
 - 5. Species and number of animals
 - 6. Observed behaviors (feeding, diving, breaching, etc.)
 - 7. Description of interaction with the operation
- E. If any parts or whole turtles are taken incidental to the project(s), Nancy Haley (203) 579-7067 or Mary Colligan (978) 281-9116 must be contacted within 24 hours of the take. Any dead sea turtles or turtle parts taken shall be placed in plastic bags and labeled to note location, load number, and time taken, and placed in cold storage. Dead turtles or turtle parts will be further labeled as recent or old kills based on evidence such as fresh blood, odor, and length of time in water since death. Disposition of dead sea turtles or sea turtle parts will be determined by NMFS. Live, uninjured or live, injured turtles will be held onboard the dredge until such time as the trained NMFS-approved observer decides that the turtle is ready for release away from the dredge site, or should be transported to the appropriate NMFS Northeast Stranding Network members for rehabilitation:

For New Jersey:

Bob Schoelkopf (609) 266-0538 The Marine Mammal Stranding Center P.O. Box 773 Brigantine, NJ 08203

For Delaware:

Leon Spence (302) 739-4782 Delaware Div. of Fish and Wildlife P.O. Box 1401 Dover, DE 19903

Any marine mammal injuries or mortality should be reported immediately to the appropriate stranding network member listed in the preceding paragraph and Dana Hartley, NMFS Northeast Stranding Network Coordinator, at (508) 495-2090.

III. NMFS Observer Guidelines:

Guidelines for NMFS, Northeast Region, Approval of Endangered Species Observers for ACOE Dredge Projects

Skill Sets

If <u>sea turtles</u> are likely to be present, observers must be able to:

- a) Identify sea turtle species and recognize the morphological differences between sea turtle species.
- b) Handle live sea turtles and be knowledgeable of holding and release procedures.
- c) Take standard field measurements of samples.
- d) Observe and advise dredge operators on the appropriate screening of the dredge's overflow, skimmer funnels and dragheads for turtles (if hopper dredges might be employed).

II. If shortnose sturgeon are likely to be present, observers must be able to:

- a) Identify shortnose sturgeon and understand the morphological difference between shortnose and Atlantic sturgeon.
- b) Handle live shortnose sturgeon and be knowledgeable of holding and release procedures.
- c) Take standard field measurements of samples (total length and fork length).
- d) Observe and advise dredge operators on the appropriate screening of the dredge's overflow, skimmer funnels and dragheads for sturgeon (if hopper dredges might be employed).

III. If whales are likely to be present, observers must be able to:

- a) Identify endangered whale species that may be encountered during project operations.
- b) Discern whale behaviors, such as milling, traveling, and feeding.
- c) Demonstrate knowledge of individually distinctive markings on humpback and right whales for identification purposes.

Observer Credentials

Certain credentials and experience might indicate an observer has the skills listed above. Ideally, the applicant will have educational background in marine biology, general experience aboard dredges, and hands on field experience with the species of concern.

A person who does not have a college degree in marine biology or a related field may be qualified as an observer if she/he has successfully completed an approved endangered species dredge observer training program (item 3a), and has twice the experience identified as necessary in items (3b), (3c), and (3d).

- 1. EDUCATION: *College degree (BS or higher) in marine biology or a related field, and
- 2. Dredge/Afloat experience:
 - a) For shortnose sturgeon or sea turtle observers: Work for a minimum of one week in any capacity aboard dredges of the same type as those to be used in the proposed project, or
 - b) For large whale observers: Work for a minimum of two months as a *naturalist* or wildlife guide aboard an active whale watch vessel or other vessel primarily engaged in the observation of large whales in the wild, and

3. FIELD EXPERIENCE AND EQUIVALENTS

- a) Successful completion of an approved endangered species dredge observer training course, **or**
- b) Documented field research focused on the species or its habitat, or
- c) Work for a minimum of four months as an endangered species observer-in-training aboard dredges that have interacted with the species in question, or
- d) Active involvement for a minimum of one year in organized responses to protected species stranding events where sea turtles and marine mammals are identified and handled.

Note: If dredge operations are likely to interact with more than one group of protected species, the

observer must demonstrate that he/she has all of the respective skill sets. For example, if channel maintenance dredging is conducted in turtle habitat and the dredged material is dumped in the offshore habitat of whales, the observer should meet the criteria listed in section I and III above.

APPENDIX B (I)

Shortnose Sturgeon Mortality Report

		Dredge Type:	
Dredge Location (nearest rkm &	landmark/town):		
Observer on site: Y / N	Photos taken: Y / N	Water Temp	(°C)
Measurements: Fork Length:	in./ mm	Total Length:	in./ mm
Fork Length	(FL, to nearest mm)		
1 OIR DOUGH			

Comments (condition of fish, how discovered, etc.):

Disposition of carcass and any tissues:

APPENDIX B (II)

Instructions for Tissue Removal from Shortnose Sturgeon and Disposition of Carcasses

a.) Instructions for Tissue Removal from Shortnose Sturgeon:

Using a sharp knife, cut away a one centimeter square piece from the soft tissue on any of the fins. Place the sample in a sealed container containing 95% ethanol. Include a copy of the shortnose sturgeon mortality report with the shipment. Unless otherwise instructed by the NMFS, ship the sample to:

Dr. Ike Wirgin
Institute of Environmental Medicine
New York University Medical Center
Long Meadow Road
Tuxedo, New York 10987
(914) 351-2415

b.) Disposition of Fish Carcasses:

Unless otherwise instructed by the NMFS, transfer shortnose sturgeon mortalities to the institution listed below. Include a copy of the shortnose sturgeon mortality report with the specimen.

Academy of Natural Sciences
Department of Ichthyology
1900 Benjamin Franklin Parkway
Philadelphia, Pennsylvania 19103-1195

Contact: Bill Saul, Collection Manager (215) 299- 1026

APPENDIX B (II)

Instructions for Tissue Removal from Shortnose Sturgeon and Disposition of Carcasses

a.) Instructions for Tissue Removal from Shortnose Sturgeon:

Using a sharp knife, cut away a one centimeter square piece from the soft tissue on any of the fins. Place the sample in a sealed container containing 95% ethanol. Include a copy of the shortnose sturgeon mortality report with the shipment. Unless otherwise instructed by the NMFS, ship the sample to:

Dr. Ike Wirgin
Institute of Environmental Medicine
New York University Medical Center
Long Meadow Road
Tuxedo, New York 10987
(914) 351-2415

b.) Disposition of Fish Carcasses:

Unless otherwise instructed by the NMFS, transfer shortnose sturgeon mortalities to the institution listed below. Include a copy of the shortnose sturgeon mortality report with the specimen.

Academy of Natural Sciences
Department of Ichthyology
1900 Benjamin Franklin Parkway
Philadelphia, Pennsylvania 19103-1195

Contact: Bill Saul, Collection Manager (215) 299- 1026

APPENDIX E

Endangered Species Observer Daily Report Form

Date: Water temperature Condition of screen	Weathe (°C): surface ning apparatus:	r conditions:	below mid depth
(If sturgeon or turtl	e, fill out incident	report; if whale, o	(Circle) Yes No lescribe below) usual circumstances, etc:)
<u>Species</u>		ridge Watch S # of Animals	·

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 SCOPE OF SECTION

This section includes includes the addresses and phone numbers for the standards publishing organizations whose documents are referenced in other sections of these specifications

1.2 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.3 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

One East Wacker Dr., Suite 3100

Chicago, IL 60601-2001

Ph: 312-670-2400

Publications: 800-644-2400

Fax: 312-670-5403

Internet: http://www.aisc.org

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

1819 L Street, NW, 6th Floor

Washington, DC 20036 Ph: 202-293-8020 Fax: 202-293-9287

Internet: http://www.ansi.org/

Note --- Documents beginning with the letter "S" can be ordered

from:

Acoustical Society of America Standards and Publications Fulfillment Center P. O. Box 1020

Sewickley, PA 15143-9998

Ph: 412-741-1979 Fax: 412-741-0609 Internet: http://asa.aip.org
General e-mail: asa@aip.org

Publications e-mail: asapubs@abdintl.com

ASTM INTERNATIONAL (ASTM)

100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Ph: 610-832-9585 Fax: 610-832-9555

Internet: http://www.astm.org

AMERICAN WELDING SOCIETY (AWS)

550 N.W. LeJeune Road

Miami, FL 33126

Ph: 800-443-9353 - 305-443-9353

Fax: 305-443-7559

Internet: http://www.amweld.org

AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)

P.O. Box 5690

Grandbury, TX 76049-0690

Ph: 817-326-6300 Fax: 817-326-6306

Internet: http://www.awpa.com

NAVAL SEA SYSTEMS COMMAND (NSSC)

Defense Distribution Depot Susquehanna, PA

(BLDG 05 for unclassified pubs/docs)

5450 Carlisle Pike

Mechanicsburg, PA 17055-0789

Telephone: (215) 697-4374 (Cash Sales) or (215) 697-2237 (Customer

Service)

Many Salvage and Diving manuals, publications, and related documentations are currently available in CD-ROM format. An updated version of the CD-ROM will soon be available. Distribution Statement C applies to some of the publications available on the CD, therefore, its availability is limited to Government agencies and their contractors.

AOK6/99

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT)

Forum Place

555 Walnut Street

Harrisburg, PA 17101-1900

Internet: http://www.dot.state.pa.us

SOUTHERN PINE INSPECTION BUREAU (SPIB)

4709 Scenic Highway

Pensacola, FL 32504-9094

Ph: 850-434-2611 Fax: 850-433-5594 e-mail: spib@spib.org

Internet: http://www.spib.org

U.S. ARMY CORPS OF ENGINEERS (USACE)

Order CRD-C DOCUMENTS from:

U.S. Army Engineer Waterways Experiment Station

ATTN: Technical Report Distribution Section, Services

Branch, TIC

3909 Halls Ferry Rd.

Vicksburg, MS 39180-6199

Ph: 601-634-2664 Fax: 601-634-2388

Internet: http://www.wes.army.mil/SL/MTC/handbook/handbook.htm

Order Other Documents from: USACE Publications Depot

Attn: CEIM-SP-D 2803 52nd Avenue

Hyattsville, MD 20781-1102

Ph: 301-394-0081 Fax: 301-394-0084

Internet: http://www.usace.army.mil/publications

or http://www.hnd.usace.army.mil/techinfo/index.htm

U.S. ARMY CORPS OF ENGINEERS (PHILADELPHIA DISTRICT)

100 Penn Square East Wanamaker Building Philadelphia, PA 19107 Ph: 215-656-6519/6520

U.S. DEPARTMENT OF COMMERCE (DOC)

1401 Constitution Avenue, NW

Washington, DC 20230

Internet: http://www.commerce.gov/

Order Publications From:

National Technical Information Service

5285 Port Royal Road Springfield, VA 22161 Ph: 703-605-6000 Fax: 703-605-6900

Internet: http://www.ntis.gov

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

General Services Administration 1800 F Street, NW Washington, DC 20405

PH: 202-501-0705

Order from:

General Services Administration Federal Supply Service Bureau 1941 Jefferson Davis Highway Arlington, VA 22202

PH: 703-605-5400

Internet: http://www.fss.gsa.gov/pub/fed-specs.cfm

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

700 Pennsylvania Avenue, N.W.

Washington, D.C. 20408 Phone: 866-325-7208

Internet: http://www.archives.gov

Order documents from:

Superintendent of Documents U.S.Government Printing Office 732 North Capitol Street, NW Washington, DC 20401

Mailstop: SDE

Ph: 866-512-1800 or 202-512-1800

Fax: 202-512-2250

Internet: http://www.gpo.gov
E-mail: gpoaccess@gpo.gov

WATER QUALITY ASSOCIATION (WQA)

4151 Naperville Rd. Lisle, IL 60532 Ph: 630-505-0160 Fax: 630-505-9637

Internet: http://www.wqa.org
e-mail: info@mail.wqa.org

SECTION 01450

CONTRACTOR QUALITY CONTROL (CQC)

PART 1 GENERAL

1.1 SCOPE OF SECTION

The Contractor shall establish and maintain an effective quality control system in compliance with the Contract Clause entitled: "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, and dredging operations which comply with contract requirements.

1.2 REFERENCES (Not Applicable)

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Final Quality Control Plan; G, COR.

The Contractor shall furnish for review by the Government, not later than 10 days after receipt of Notice to Proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of Contract Clause entitled "Inspection of Construction". The plan shall identify personnel, procedures, instructions, tests, records, and forms to be used.

Interim Quality Control Plan; G, COR.

The Government will consider an interim plan for the first 30 days of operation. This plan shall be submitted at the Pre-Dredging Coordination Meeting.

Notification of Proposed Changes to the Quality Control Plan; G, COR.

Proposed changes to the Contractor quality control plan shall be submitted for approval a minimum of seven calendar days prior to any proposed change.

SD-11 Closeout Submittals

Inspection Reports; G,COR.

Daily quality control reports including preparatory and initial phase minutes shall be submitted on a daily basis as specified in paragraph "Documentation".

1.4 PRE-DREDGING COORDINATION MEETING

Before the start of dredging, the Contractor shall meet with the Contracting Officer (CO) or his authorized representatives (COR) and

discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management and control with the Government's inspection. Minutes of the meeting shall be prepared and signed by both the Contractor and the CO or COR. The minutes shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understandings.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 QUALITY CONTROL PLAN

3.1.1 General

If the Contractor fails to submit an acceptable QC plan within the time herein prescribed, the CO or COR may refuse to allow dredging to start if an acceptable interim plan is not furnished or withhold funds from progress payments in accordance with the Contract Clause entitled: "Payments Under Fixed-Price Construction Contracts" until such time as the Contractor submits an acceptable final plan.

3.1.2 Quality Control Plan

This plan shall include as a minimum, the following:

- a. A description of the QC organization, including a chart showing lines of authority and acknowledgment that the Contractor QC staff shall implement the three phase control system for all aspects of the work specified and shall report to the project manager or someone higher in the Contractor's organization.
- b. The name, qualifications, duties, responsibilities and authorities of each person assigned a QC function.
- c. A copy of the letter to the QC manager signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the QC manager shall be furnished.
- d. Procedures for scheduling and managing submittals, including chose of subcontractors, offsite fabricators, suppliers and purchasing agents.
- e. Control testing procedures for each specific test. (Laboratory must be Corps of Engineers certified.)
- f. Reporting procedures including proposed reporting formats.
- g. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements.

3.1.3 Acceptance of Plan

Acceptance of the Contractor's QC Plan is required prior to the start of dredging. Acceptance is conditional and will be predicated on satisfactory performance during the contract period. The Government reserves the right

to require the Contractor to make changes in his QC Plan and operations as necessary to obtain the quality specified.

3.1.4 Notification of Changes

After acceptance of the QC Plan, the Contractor shall notify the CO in writing of any proposed changes. Proposed changes are subject to acceptance by the CO or COR.

3.2 QUALITY CONTROL ORGANIZATION

3.2.1 QC System Manager

The Contractor shall identify an individual, within his organization at the site of the work, who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be acceptable to the CO or COR.

3.2.2 Personnel

A staff shall be maintained under the direction of the system manager to perform all QC activities. The actual strength of the staff during any specific work period may vary to cover work phase needs, shifts, and production or placement rates. The personnel of this staff shall be fully qualified by experience and technical training to perform their assigned responsibilities and shall be directly hired by and work for the prime Contractor.

3.3 CONTROL

Contractor Quality Control is the means by which the Contractor assures himself that his dredging operations comply with the requirements of the contract plans and specifications. The controls shall be adequate to cover all dredging operations, including disposal area preparation and operation, and shall be keyed to the proposed dredging sequence. The controls shall include at least three phases of control for all definable features of work as follows:

a. Preparatory Phase. This phase shall occur prior to beginning work on any definable feature of work. It shall include a review of contract requirements; a check to assure that all materials and/or equipment have been tested, submitted and approved; a check to assure that provisions have been made to provide required control testing; examination of the work area, including all disposal areas, to ascertain that all preliminary work has been completed; and a physical examination of materials, equipment and sample work to assure that they conform to approved shop drawings or submittal data and that all materials and/or equipment are on hand. The Contracting Officer Representative shall be notified at least 24 hours in advance of beginning any or the required action of the preparatory phase. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC representative and attached to the daily QC report. Subsequent to the preparatory phase and prior to commencement of dredging, the Contractor shall instruct applicable workers as to the acceptable level of workmanship required in his CQC Plan in order to meet contract requirements.

b. Initial Phase. This phase must be accomplished at the beginning of a definable feature of work. This phase shall include a check of

preliminary work, verify full compliance, establish level of workmanship, resolve all differences, and check safety to include compliance with hazard analysis. The Contracting Officer's Representative shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC representative and attached to the daily QC report. The initial phase shall be repeated for each new crew to work on site, or if acceptable standards of workmanship are not being met.

c. Follow-Up Phase. Daily checks shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. Such inspections shall be made a matter of record in the CQC documentation as required below. Final follow-up inspections shall be conducted and test deficiencies corrected prior to the start of additional features of work.

3.4 COMPLETION INSPECTION

Upon completion of dredging in each acceptance section or individual work assignment area specified in Section 02325 DREDGING of these specifications, the CQC System Manager shall conduct a completion inspection of the work and develop a "punch list" of items which do not conform to the approved plans and specifications. Such a list shall be included in the CQC documentation as required below, and shall include the estimated date by which the deficiencies will be corrected. The Contractor QC System Manager or his staff shall make a second completion inspection to ascertain that all deficiencies have been corrected and so notify the COR. The completion inspection and any deficiency corrections required by this paragraph will be accomplished within the time stated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

3.5 DOCUMENTATION

The Contractor shall maintain current records of QC operations, activities, and tests performed including the work of suppliers and subcontractors. These records shall be on the Daily Construction Quality Control Report form, a copy of which is attached to this section of the specifications and shall include factual evidence that required activities or tests have been performed, including but not limited to the following:

- a. Type and number of control activities and tests involved.
- b. Results of control activities or tests.
- c. Nature of defects, causes for rejection, etc.
- d. Proposed remedial action.
- e. Corrective actions taken.
- f. In addition, these records shall indicate a description of trades working on the project, the number of personnel working, the weather conditions encountered, any delays encountered, and acknowledgment of instructions given by Government representative. These records shall cover both conforming and defective or deficient features and shall include a statement that equipment and materials incorporated in the work comply with the contract.

3.6 NOTIFICATION OF NONCOMPLIANCE

The CO will notify the Contractor of any noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his representative at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the CO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.7 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

(Sample of typical Contractor Quality Control Report)

CONTRACTOR'S NAME (address)

DAILY CONSTRUCTION QUALITY CONTROL REPORT

Contract No	Date
Project Name	Report No.
	Report No.
Weather	
<u>Phases of Construction in Progress</u> (Give briefly only progress)	phase or phases of work in
Material and/or Equipment Delivered to Site (Includi	ng equipment demob)
<u>Inspection Made</u> (Include negative inspections, phase work inspected and all deficiencies noted during ins	
Preparatory	
Initial	
Follow-Up	

Tests Performed and	Results or	Tests	(including	results	of	tests	taken	on
previous dates)								
Verbal Instructions For personnel on construction be taken)	Received (List ction deficier	any in ncies,	nstructions retesting r	given by equired	Con etc.	tractir , with	ng Offi action	cer to
Changed Conditions/De	elays/Conflic	ts Enco	ountered					
Remarks								
								
			a - a					
			SIGNATU	RE				
				Quali	ty Co	ontrol	Inspec	tor
Contractor's Verific	=	houro r	oport is so	omploto s	and	aorroat	- and	
material and equipment in compliance with the and job safety and health Requirement	nt used and wo ne contract pl ealth require	ork per lans an ments a	formed duri d specifica are in acco	ng this tions ex	repoi cept	rting p as not	eriod ed abo	are ve,
			Cont	ractor's	Appı	roved A	uthori	zed
			22110		T. L.		sentat	

SECTION 02212

DIKE EMBANKMENT

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for performing land surveys, excavation of materials, construction of the embankments, and grading as specified herein and shown on the drawings.

1.2 REFERENCES

The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 698	(1991) Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft (600 kN-m/m))
ASTM D 2216	(1992) Laboratory Determination of Water (Moisture) Content of Soil and Rock
ASTM D 2487	(1993) Standard Test Method for Classification of Soils for Engineering Purposes
ASTM D 3017	(1988, Rev. 1993) Water Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth)

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT)

PennDOT Specifications 2000 Edition

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the office indicated prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved or reviewed by, the office indicated prior to commencing the particular task to which the submittal is associated.

SD-01 Pre-Construction Submittal

Work Plan; G COR.

The work plan shall include equipment list and methods proposed for surveying, excavation, embankment construction, and grading. The plan shall be submitted and approved by the Contracting Officer prior to the commencement of work specified in this section.

SD-02 Shop Drawings

Record Drawings; G COR.

During the progress of the work, the Contractor shall keep a careful record at the job site of all changes and corrections from the layouts shown on the drawings. The Contractor shall enter such information on record drawings promptly but in no case later than on a weekly basis. The record drawings shall also indicate the actual location, kinds, and sizes of all subsurface utility lines. At the time of completion and acceptance of each section of the dike embankment and other separate features, the Contractor shall submit the record drawings to the Contracting Officer.

SD-03 Product Data

Surveys; G COR.

Survey data shall be submitted as specified in Paragraph "Survey Report Data Submittal". Post embankment construction surveys shall be submitted no later than 7 days after grading has been completed, and at least 15 days prior to any dredged material being placed in the disposal area.

SD-06 Test Reports

Field Moisture Tests; G COR.

The Contractor shall provide copies of all laboratory and field test reports to the Contracting Officer within 24 hours of the completion of the test.

SD-07 Certificates

Silt Fence; G COR.

Certificates of compliance attesting that the silt fence conforms to the requirements of this specification shall be submitted for approval.

Qualifications; G COR.

Provide qualifications of the independent licensed surveyor.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Dike Embankment Fill

All fill materials for construction of the dike embankments shall be satisfactory materials obtained from on-site within the borrow areas and work limits available for the contract and shown on the drawings.

Satisfactory materials are defined as materials free from roots and other organic matter, trash, debris, frozen materials, mud, or stones larger than 6 inches in any dimension.

2.1.2 Crushed Aggregate

Crushed aggregate fill used on the top of the dikes at the Palmyra Disposal Area and for any discharge line road crossings at all areas shall meet the requirements of Subsection 703.2 of the PennDOT Specifications. It shall have a gradation designation of No. 2A as specified in Subsection 703.2 (c), Table C of the PennDOT Specifications.

2.1.3 Silt Fence

Silt fence used around the baseline at the Palmyra Disposal Area shall meet the requirements of Subsection 865.2 of the PennDOT Specifications, Type A.

2.2 EQUIPMENT

2.2.1 Tamping Rollers

Tamping rollers shall consist of a heavy-duty double drum unit with a drum diameter not less than 60-inches and an individual drum length of not less than 60-inches. The drums shall be water or sand and water ballasted. Each drum shall have staggered feet uniformly spaced over the cylindrical surface such as to provide approximately three tamping feet for each 2 square feet of drum surface. The tamping feet shall be 7 to 9 inches in clear projection from the cylindrical surface of the roller and shall have a face area of not less than 5 nor more than 7 square inches. The roller shall be equipped with cleaning fingers, so designed and attached as to prevent the accumulation of material between the tamping feet. The cleaning fingers shall be maintained at their full length whenever the roller is in use. The weight of the roller shall not be less than 3,500 pounds per foot of linear drum length weighted, and shall not be more than 2,000 pounds per foot of drum length empty. The two drums comprising one roller unit shall be yoked such that they will oscillate when transversing uneven surfaces. The design and operation of the tamping roller shall be subject to the approval of the Contracting Officer who shall have the right at any time during the contract period to direct such repairs to the tamping feet, minor alterations to the roller, and variations in the weight as may be necessary, in his opinion, to obtain optimum compaction of the fill materials. The Contractor may be required to add ballast to the roller to the maximum capacity specified by the roller manufacturer. The roller shall be drawn by a track-type or wheeled tractor at speeds not greater than 3.5 miles per hour. The use of wheeled tractors will not be permitted if the tires produce ruts that prevent uniform compaction by the tamping roller

2.2.2 Self-Propelled Rollers

At the option of the Contractor, self-propelled tamping rollers may be used in lieu of the tractor-drawn tamping rollers. Self-propelled rollers exceeding the empty weight requirements specified above may be used provided that, by substitution of tamping feet having a face area not exceeding 14 square inches, the nominal pressure on the tamping feet of the self-propelled roller can be adjusted to approximate the nominal pressure of the tractor-drawn tamping roller required for each particular work condition. The tire pressure for self-propelled rollers which are steered by wheels shall not exceed 40 pounds per square inch. Self-propelled rollers shall be operated at speed not greater than 3.5 miles per hour.

2.2.3 Rubber-Tire Rollers

Rubber-tire rollers shall have a minimum of four wheels equipped with pneumatic tires. The tires shall be of such size and ply as to be capable of being operated at tire pressures between 80 and 100 pounds per square inch at a 25,000 pound wheel load. The roller wheels shall be located abreast and so designed that each wheel will carry approximately equal load when traveling on uneven ground surfaces. The spacing of the wheel shall be such that the distance between the nearest edges of adjacent tires will not be greater than 50 percent of the rated tire width of a single tire at the operating pressure for a 25,000 pound wheel load. The roller shall be provided with a body suitable for ballast loading such that the load per wheel may be varied, as directed by the Contracting Officer, between 18,000 and 25,000 pounds. The roller shall be towed at speeds no greater than 5 miles per hour. The character and efficiency of this equipment will be subject to the approval of the Contracting Officer.

2.2.4 Track-Type Tractors

Track-type tractors used for the work shall weigh not less than 20,000 pounds and shall exert a unit tread pressure of not less than 6 pounds per square inch. Track-type tractors shall not be operated at speeds in excess of 3.5 miles per hour.

2.2.5 Sprinkling Equipment

Sprinkling equipment shall consist of tank trucks, pressure distributors, and other approved equipment designed to apply water uniformly and in controlled quantities to variable widths of the embankment surface.

2.2.6 Miscellaneous Equipment

Scarifiers, disks, spring tooth or spike tooth harrows, spreaders, and all other equipment proposed for use in the work shall be approved types, suitable for performing the work specified herein.

PART 3 EXECUTION

3.1 SURVEYS

3.1.1 Qualifications of Surveyor

All surveys must be performed by an independent survey company. All surveys shall be performed under the direction and supervision of a Professional Licensed Surveyor.

3.1.2 General

The Contractor shall obtain post embankment construction survey cross sections at 200 foot intervals along and perpendicular to the construction baselines. At a minimum, elevations shall be obtained at 50 foot intervals and at the inner and outer toes and crests of all slopes, at all midpoints of slopes, at the centerline of proposed embankments and at any other significant grade changes or site features along the cross-sections. Each cross section shall extend from the contractor's work limits to at least 50 feet interior of the inner toe of the proposed embankments. Cross sections shall be surveyed utilizing surveying procedures and methodology that shall

meet accuracy tolerances of +/-0.10 feet in the vertical and +/-1.0 feet in the horizontal.

3.1.3 Control

Survey control for the above cross sections shall be established from the existing survey control description data provided in Section 00855 and baseline data as shown on the drawings. The Contractor shall utilize NAVD 88 as the vertical datum for elevation and New Jersey State plane grid, NAD 83 for the horizontal datum for references for all cross sections.

3.1.4 Survey Report Data Submittal

All survey cross section data shall be reduced and tabulated as a series of eastings, northings, elevations and description sets. The data shall be submitted to the Contracting Officer upon completion of the surveys. The Contractor shall allow 72 hours from the Government's receipt of the survey data for review and approval/disapproval.

3.1.4.1 Notification and Time Frame

The Contractor shall notify the Contracting Officer's Representative of the anticipated date of the Government's receipt of each Contractor survey report (as described in the paragraph entitled "SURVEYS" above) at least 7 days (Saturdays, Sundays and holidays are excluded) in advance of the Government receipt of that report. The time and cost for any corrective action to correct unacceptable conditions, and for second and subsequent acceptance surveys in the work area, is the responsibility of the Contractor, and must be accomplished within the completion period established for the contract.

3.2 INSTALLATION OF TEMPORARY SILT FENCING

Temporary silt fencing shall be installed at the locations shown on the drawing at the Palmyra Disposal Area. Final placement shall be as directed by the Contracting Officer. The Contractor shall remove the silt fencing at the end of the contract.

3.3 BORROW OF MATERIAL

Borrowing of material shall be done no closer than 30 feet from the anticipated interior toe of slope of the proposed dikes and to a maximum depth of +26 NAVD 1988 at the Burlington Island Disposal Area and +10 NAVD 1988 at all other disposal areas, or 1 foot above the existing water table, whichever is shallower and as indicated on the drawings. The slopes of the cut on the edge of the borrow area shall be no steeper than 1 horizontal to 2 vertical. All areas shall be graded towards the sluice to prevent any residual ponding after borrow operations cease.

3.4 FOUNDATION PREPARATION

All surfaces on or against which fill material is to be placed shall be scarified to a minimum depth of 6-inches and compacted just prior to the placement of the fill material. Compaction of scarified surfaces shall be as specified in paragraph: "Compaction Operations" of this section. If, in the opinion of the Contracting Officer, any surfaces to receive fill become compacted in such a manner that a plane of seepage or weakness might result, the surface shall be thoroughly broken by making two passes with a

track-type tractor prior to the placement of material thereon. In areas where the existing dike is to be raised, the surface of the existing dike shall be prepared as specified above. All scarification and breaking of surfaces shall be done parallel to the center-line of the existing dike. Foundation preparation work shall proceed at least 300 feet, or as directed by the Contracting Officer, in advance of the embankment construction.

3.5 EMBANKMENT CONSTRUCTION

3.5.1 General

Unless otherwise specified or directed by the Contracting Officer, the embankment shall be constructed to the lines, grades, and slopes shown on the drawings. Under no circumstances shall frozen fill material, snow or ice be placed in the embankment. The Contracting Officer will have the authority to require the removal of frozen material at the Contractor's expense. Any erosion of the construction embankment shall be repaired within two working days.

3.5.2 Compacted Fill

Fill material shall be placed and spread in layers not exceeding 12-inches in loose thickness prior to compaction. Layers shall have a sufficient crown or slope to provide satisfactory drainage during construction. If, in the opinion of the Contracting Officer, the surface of any compacted layer is too smooth to bond properly with the succeeding layer, it shall be scarified to the satisfaction of the Contracting Officer prior to the placement of material thereon. Placement of fill material by casting equipment will be permitted as an alternative to placement with hauling equipment. If casting equipment is used, the fill material shall be spread in layers of not more than 12-inches in loose thickness prior to compaction.

3.5.2.1 Moisture Control

Moisture content of fill material shall be within the limits specified in the paragraph: CONTRACTOR QUALITY CONTROL. If the fill material is too dry, the material shall be pre-wetted in the borrow area or uniformly sprinkled with water after placement in the embankment so the moisture content is within the specified limits just prior to compaction. If the moisture content of the fill material is too wet, the material shall be aerated in the borrow area or on the embankment after placement until the moisture content is within the specified limits just prior to compaction.

3.5.2.2 Compaction Operations

Surfaces to be compacted shall be free of standing water, ruts, and unnecessary roughness. Each layer of fill material shall be compacted by not less than four passes of the approved roller or tractor. Each pass of the roller shall overlap the preceding or adjacent pass by not less than 1-foot. Portions of the embankment which cannot be reached by the roller shall be compacted to the density of the surrounding embankment by a method approved by the Contracting Officer. The Contractor shall schedule his daily operations so that all fill material placed in the dike embankment is compacted by four passes of the roller or tractor by the end of the workday.

3.5.3 Dressing

The entire embankment shall be brought to not less than the gross cross-section shown on the drawings at all points. Unreasonable roughness

of surface shall be dressed out.

3.5.4 Zoning of Materials

In general, the dike sections shall be homogeneous. However, if materials of varying permeabilities are encountered in the borrow area, the more impervious fill material shall be placed toward the inner slopes of the embankment.

3.5.5 Grade Tolerances

At all points a tolerance of 0.5 foot above the grades shown on the drawings will be permitted in the final dressing, provided that any excess material is distributed so that the crown of the embankment drains inward towards the disposal area and there are no abrupt humps or depressions in the surfaces or bulges in the width of the crown. However, this above grade tolerance may be modified at locations where, in the opinion of the Contracting Officer, such modifications will not impair the design or appearance of the embankment. At no point shall the final dressing be below the grades shown on the drawings.

3.6 SLIDES

If sliding of any part of the dike occurs prior to its acceptance, the Contractor shall repair the slide at the direction of the Contracting Officer. Repairs shall consist of providing additional fill material to restore the desired grades and slopes. If the slide is due to the fault of the Contractor, this work shall be performed without cost to the Government. If the slide is not due to the fault of the Contractor, it will be handled under Contract Clause "CHANGES".

3.7 CONTRACTOR QUALITY CONTROL

Moisture density tests shall be performed on fill material in accordance with ASTM D 698 and ASTM D 3017 upon commencement of dike embankment construction and when any change in material or borrow areas occur. Moisture density tests are required only to establish moisture content controls; compaction control is specified in paragraph "Compaction Operations". Daily determinations of the moisture content of the placed fill shall be made by the Contractor as directed by the Contracting Officer prior to compaction. A minimum of two (2) moisture content tests shall be performed per day of fill placed: one before the start of filling and a second test at 4 to 5 hours after filling commences. Moisture content of placed fill shall be performed and shall be +/- 5% points of optimum in accordance with ASTM D 698. In-place moisture content, determined by ASTM D 3017 shall be cross-checked in accordance with ASTM D 2216 a minimum of one time during the course of dike construction at each disposal area and as directed by the Contracting Officer.

3.8 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the contract lump sum price for the appropriate bid items under Bid Item No. 3 "Disposal Area Development Construction".

-- End of Section --

SECTION 02230

CLEARING AND GRUBBING

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 Clearing

Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of trees and other vegetation designated for removal, including down timber, snags, brush, and rubbish occurring in the areas to be cleared, as directed by the Contracting Officer.

1.1.2 Grubbing

Grubbing shall consist of the removal and disposal of stumps, roots larger than 3 inches in diameter, and matted roots from the designated grubbing areas, as directed by the Contracting Officer.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 CLEARING

The Contractor shall clear all areas within the limits shown on the drawings for the government-owned disposal areas. All clearing work within the limits of the proposed embankment shall be completed at least 300 feet in advance of the embankment construction work specified in SECTION 02212: DIKE EMBANKMENT. Clearing shall consist of felling, trimming, cutting, removing, and disposing all trees, stumps, roots, snags, brush, and all other vegetative growth, and shall be performed in such a manner as to remove all evidence of same from the ground surface. The Contractor shall also remove all existing trash and debris within the limits of the work.

3.2 GRUBBING

The Contractor shall grub all areas within the limits shown on the drawings for the government-owned disposal areas. Debris shall be removed to a depth of not less than 18 inches below the original surface level of the ground. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground.

3.3 DISPOSAL OF MATERIALS

All materials resulting from clearing and grubbing operations shall be disposed of offsite, the cost of which to be included in the lump sum price for the work described herein. All trash and debris resulting from the clearing and grubbing operations shall be removed from the work site and disposed of at the Contractor's expense. Burning at the site will not be permitted.

3.4 MEASUREMENT AND PAYMENT

3.4.1 Clearing and Grubbing - Disposal Area Sites

The work specified in this section will not be measured for payment and all costs in connection with clearing and grubbing at the disposal area sites shall be included in the contract lump sum price for all bid items under Bid Item No.3 "Disposal Area Development Construction".

-- End of Section --

SECTION 02325

DREDGING

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT PRICE

The contract price per cubic yard for dredging shall include the cost of removal and disposal of all materials as specified herein or indicated on the drawings, with the exception of ledge rock, large boulders, rock fragments, wrecks, snags, stumps, and piles which cannot be removed or buried below project depth without blasting. Should ledge rock or other material which cannot be removed without blasting be encountered, the Contractor shall remove therefrom all overlying material which in the judgement of the Contracting Officer can be removed. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at prices agreed upon and approved in accordance with Contract Clause: "DIFFERING SITE CONDITIONS."

1.2 REFERENCES

The publications listed below form a part of these specifications to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN WOOD PRESERVERS' ASSOCIATION (AWPA)

AWPA C2 (1995) Lumber, Timbers, Bridge Ties and

Mine Ties - Preservative Treatment by

Pressure Processes

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 2103 (1992) Polyethlene Film and Sheeting

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT)

PENNDOT Specifications (2000 Edition) Publication 408

Specifications

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 156 (1992) Navigation and Navigable Waters,

Oil and Hazardous Material Tranfer

Operations

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS MM-L-751 (Rev H) Lumber, Softwood

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB-01 (1994; Supplements 1 thru 4)Standard Grading Rules for Souther Pine Lumber

U.S. DEPARTMENT OF COMMERCE (DOC)

PS-20 (1970) American Softwood Lumber Standard

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 1110-2-1003 (1 JAN. 2002) Hydrographic Survey Manual

EM 385-1-1 (Latest Rev.) Safety and Health Requirements Manual

1.3 DREDGING RESTRICTIONS AND ORDER OF WORK

The following dredging time restrictions apply to this contract:

- a. Hydraulic Dredging- Station 112+439 (Kinkora Range) to Station 160+325 (Bridge Range/Upper end of project), dredging can be performed from July 15 to January 1.
- b. Bucket Dredging Station 0+000 (Allegheny Avenue) to Station 160+325 (Bridge Range/Upper End of Project), dredging is prohibited from 15 March through 31 May.

The Contractor shall establish his order of work in accordance with these restrictions and plan his work accordingly.

1.4 CHARACTER OF MATERIALS

- a. The material to be removed to restore the depth within the limits called for in the specifications and drawings, is that composing the shoaling that has occurred since the channel was last dredged as indicated in the Special Clauses. The character of the material is believed to be as indicated in the Abstract of Bottom Samples included in Section 00845 of this contract, which depicts the typical density of maintenance dredging material that historically has accumulated within the project channel and is considered representative of the pay quantity for this contract.
- b. It is the Government's position that sufficient information has been provided in this contract package to enable the Contractor to establish the type and quantity of material to be removed. However, prior to bidding, the Contractor may, at his discretion and expense, conduct additional investigation to further determine conditions at the site.

1.5 SITE CONDITIONS

Bidders are expected to examine the site of the work, including the disposal areas and decide for themselves as to the conditions affecting their operations. See Contract Clause entitled: "SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK." The entire work site is designated as a hard hat area in accordance with Corps of Engineers EM 385-1-1.

1.6 FUEL OIL HANDLING

The Contractor shall assure that all fuel oil transfer operations to or from his plant comply with all Federal, state, and municipal laws, codes and regulations. The Contractor shall incorporate in his accident prevention program, submitted in compliance with Contract Clause: "ACCIDENT

PREVENTION," sufficient information to demonstrate compliance with 33 CFR 156 and any other applicable laws, codes, and regulations.

1.7 DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS) EQUIPMENT

The Contractor must have a differential GPS, in accordance with the requirements for a Class 1 Survey, as defined in the U.S. Army Corps of Engineers Hydrographic Surveying Manual EM 1110-2-1003, dated 1 January 2002. The Contractor shall provide real time positioning on a computer screen during dredging, and have the capability of playback in 15 minute intervals. The position must be recorded on a disk every 15 minutes and submitted to the Contracting Officer on a daily basis. The DGPS shall indicate the position of the dredge and each dump scow. The position of each scow shall automatically be recorded when the dump scow discharges. All scows must be equipped with pressure differential gages.

1.8 SUBMITTALS

Government approval is required for submittals with "G" designation; submittals having no designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the CO prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved by, the CO prior to commencing the particular task to which the submittal is associated.

SD-01 Preconstruction Submittals

Pumpout Plan; G COR

If a hopper dredge is used for the contract work, the Contractor shall submit to the Contracting Officer for approval its plan for direct pumpout of dredged material. If a bucket dredge is used for the contract work, the Contractor shall submit a hydraulic unloading system plan for approval by the Contracting Officer. Plans shall include the description, dimensions, and location of the proposed facilities.

Disposal Area Plan; G COR

The Contractor shall submit to the Contracting Officer for approval its plan for usage or modification of the Government-furnished upland disposal area and the development of any Contractor-furnished upland disposal areas. This plan shall show the areas or portions thereof to be used, the locations and cross-sections of proposed dikes, the locations of sluices and drainage structures, and the manner in which the dredged material will be distributed in the disposal areas. Plans for any contractor-furnished rehandling basins and inclosures, including character of materials to be used, means of placement, and cross-sections of proposed dikes and other structures, shall also be submitted for approval by the Contracting Officer.

Discharge Pipe Support Plan; G COR

The Contractor shall submit for approval a description of the proposed method for supporting the discharge pipe inside the disposal area as required by these specifications, to include sketches showing plan and

elevation views and details for the proposed method, and data on the materials to be used.

SD-03 Product Data

Vessel and Equipment List; G COR

The Contractor shall submit for approval a complete list of all vessels and equipment to be used during the contract, including all dredging plants, supporting vessels, and equipment. The vessel list shall contain the types, the numbers of each, the draft of each, and all other pertinent information.

SD-06 Test Reports

Daily Report of Operations; G COR

The Contractor shall prepare, maintain, and submit daily for approval, Daily Report of Operations forms, and shall furnish signed copies thereof with the Quality Control Reports required in SECTION 01450: CONTRACTOR QUALITY CONTROL (CQC), to the Contracting Officer. Copies of the Daily Report of Operations forms to be used are attached at the end of this section. Further instructions on the preparation and submittal of the forms will be provided at the Pre-Dredging Coordination Meeting.

DGPS Positioning

Records of position during dredging and overboard disposal operations shall be recorded on disk every 15 minutes and submitted to the Contracting Officer on a daily basis.

Disposal Area Effluent Measurements

Records of disposal area effluent measurements and corrective action taken shall be submitted daily to the Contracting Officer.

SD-07 Certificates

Timber-Flash Boards; G COR

Certificates of compliance attesting that the timber-flash boards conform to the requirements of this specification shall be submitted for approval.

Plans for Contractor-Furnished Rehandling Basin; G COR

Plans for the rehandling basins, and inclosures, including character of materials to be used, means of placement and cross-sections of proposed dikes or other structures shall be submitted for approval.

PART 2 PRODUCTS

All lumber for flash-boards shall be Southern Yellow Pine, dense structural grade, and shall conform to SPIB-01 and the applicable requirements of FS MM-L-751. Flash-boards shall be surfaced four sides and the dress size shall conform to U.S. Department of Commerce PS-20. Flash-boards shall be pressure- preservative treated with chromated copper arsenate (water-borne solution) in accordance with AWPA C2 to have a minimum net retention of

solid preservative of 2.5 pounds per cubic foot. Strong solution for brush treatment shall be available at the site and all cut surfaces shall be heavily brushed. Flash-boards shall be 4 inch nominal thickness.

PART 3 EXECUTION

3.1 DISPOSAL OF EXCAVATED MATERIAL

3.1.1 General

The material excavated shall be transported, deposited, confined and graded to drain as specified within the disposal areas shown on the drawings or within disposal areas furnished by the Contractor and approved by the Contracting Officer.

3.1.2 Misplaced Material

Any material deposited in places other than those designated or approved by the Contracting Officer, or which escapes from such places, will not be paid for. The Contractor may be required to remove such misplaced material in accordance with the Contract Clause entitled: "OBSTRUCTION OF NAVIGABLE WATERWAYS" and deposit it where directed at his expense.

3.1.3 Hydraulic Dredging

Material excavated by hydraulic pipeline dredging shall be transported by pipeline to final position in the approved disposal areas. All pipelines shall be kept in good condition at all times, and any leaks or breaks along their length shall be promptly and properly repaired. All materials and water that leak from any pipeline on or around access roads, shall be cleared, removed and placed within the limits of the disposal area. Material excavated by hopper dredging shall be loaded into bins or hoppers to overflow only and pumped directly into the approved disposal areas by a means which will preclude any loss of material to the river prior to deposit in the disposal areas.

The use of hopper dredge is subject to the following conditions:

- a. Bottom dumping prohibited
- b. Pumping operations must cease at overflow
- c. The Government must approve location of mooring facility to be utilized for pump out.

Special care shall be taken to assure that hoppers do not leak during any portion of the work.

3.1.4 Bucket Dredging

Material excavated by bucket (bucket, drag or dipper) dredges shall be placed in scows to overflow only and transported to either an approved enclosed basin, dumped, and then rehandled by hydraulic dredge to an approved disposal area, or to a mooring where the scows shall be unloaded by pumping directly to an approved disposal area. All rehandling operations either from underwater basins or by direct pumping from moored scows shall be in accordance with the applicable requirements for hydraulic dredging. All scows shall be kept in good condition and the coamings kept in good repair. The decks of all loaded scows shall be washed before they are moved from the loading area.

3.1.4.1 Rehandling

No Government furnished rehandling basin is available for the contract work. Dump scows shall have their pockets provided with proper doors or appliances to prevent leakage of materials. Underwater rehandling shall be performed in enclosed basins furnished by the Contractor and approved by the Contracting Officer. The rehandling basins shall be totally enclosed, except for one entrance channel having a maximum opening of 300 feet measured at mean low water. The dumping location shall not be closer than 800 feet from the center of the entrance opening within the enclosure. Dikes or other structures required to enclose the rehandling basins shall have top elevations not less than 10 feet above the Corps of Engineers Delaware River datum. Material dumped within the rehandling basins shall be removed daily by the rehandling dredge. Scows shall be dumped only within the marked limits of the approved rehandling basins. Plans for the rehandling basins, and inclosures, including character of materials to be used, means of placement and cross-sections of proposed dikes or other structures shall be submitted to the Contracting Officer for approval. All rehandling operations shall be maintained to the satisfaction of the Contracting Officer.

- a. Navigation Markers: The Contractor shall mark the limits of the rehandling basins and enclosures. Lights and signals as may be prescribed by the U. S. Coast Guard and as necessary to show the limit markers shall be installed and maintained by and at the expense of the Contractor. The Contractor shall apply for and obtain the approval of the U. S. Coast Guard for such signals and lights.
- b. Restoration: Upon completion of the work, the Contractor will be required to leave the site in which the basins were located at no higher elevation than existed prior to construction of the basins and any dikes or other structures for enclosing the basins that have been constructed offshore of mean high water shall be removed by the Contractor and the river bottom restored to the elevation which existed prior to their construction.

3.1.4.2 Direct Pumpout Rehandling

When scows are unloaded without dumping, they shall have their contents pumped directly into the approved disposal areas by a means which will preclude any loss of material to the river prior to deposit in the disposal areas. The location and development of the mooring for direct pumpout operations will be subject to approval by the Contracting Officer.

3.2 CONTRACTOR-FURNISHED DISPOSAL AREAS

The Contractor shall undertake the coordination with Federal and state agencies as specified in SECTION 01040: COORDINATION FOR CONTRACTOR-FURNISHED DISPOSAL AREAS. As specified in that section, use of these areas will be subject to the approval of the Contracting Officer.

3.3 DEVELOPMENT AND OPERATION OF DISPOSAL AREAS

3.3.1 General

Prior to the use or modification of any Government furnished disposal areas or construction for development of any Contractor furnished disposal areas, the Contractor shall submit the disposal area plan specified in the

paragraph entitled: "SUBMITTALS" to the Contracting Officer for approval. The Contractor shall conduct his work in accordance with the approved plan; however, approval of the plan does not in any manner relieve the Contractor of his responsibility for the adequacy of the design and construction of the structures and drainage facilities required. The plan shall detail construction methods and equipment for the development of the Government furnished disposal areas or any Contractor furnished disposal areas. All Contractor-owned dredging pipe used in the contract work shall be removed from the site by the Contractor within 30 days of completion of all dredging work.

3.3.2 Construction and Maintenance

3.3.2.1 Government-Furnished Disposal Areas

- a. The Contractor shall develop all disposal areas shown on the drawings and he shall construct new dikes as detailed in SECTION 02212: DIKE EMBANKMENT and construct new sluice boxes and outflow pipes as specified in SECTION 05900: SLUICE BOXES AND OUTFLOW PIPES. The Contractor shall be permitted, in the Government furnished disposal areas, to construct any other structures or use any means necessary to control the dredge effluent as required to meet these specifications with approval of the Contracting Officer.
- b. The Contractor shall be responsible for the maintenance, repair and stability of all dikes, roads and structures used by him under the contract, and shall inspect the dikes on a daily basis to assure their safety and stability. The Contractor shall restore all dikes, roads, and areas he disturbs through his operations to a satisfactory condition as approved by the Contracting Officer, at no additional cost to the Government.

3.3.2.2 Special Requirements for Government-Furnished Disposal Areas

- a. Dikes shall be constructed as detailed in SECTION 02212: DIKE EMBANKMENT. The Contractor shall provide all impervious material required for mitigation of seepage problems during disposal operations from an approved off-site source if suitable material is unavailable from within the disposal area. The agreement with the owner of the disposal areas indicated on the drawings are on file and may be examined at the Philadelphia District Office, Wanamaker Building, 100 Penn Square East, Philadelphia, PA. In addition to the requirements indicated herein, the Contractor shall deposit the excavated material in accordance with the requirements of said agreements.
- b. The dredge discharge pipelines shall be located in the disposal areas as shown on the drawings. The Contractor will be required to place the discharge pipes within the designated access corridors as shown on the drawings. The Contractor shall make provisions to prevent erosion of the dike embankment at the discharge points. Discharge pipes shall extend beyond the interior crest of the dike by a distance as specified on the contract drawings.
- c. Crushed aggregate access ramps shall be constructed as shown on the drawings to protect discharge pipes where they cross the existing gravel access roads. The crushed aggregate shall conform to Section 703 of PENNDOT Specifications, PENNDOT Type 2A. The crushed aggregate shall be compacted around the discharge pipe and the access ramp shall be constructed to the width of the gravel access road.

3.3.2.3 Contractor-Furnished Disposal Areas

In the approved disposal areas, the Contractor shall provide retaining dikes, sluices and drainage facilities as required to confine the excavated material and for controlling disposal area effluent and shall be responsible for the maintenance and stability of the disposal areas until acceptance of all work under the contract.

Note:

If the Contractor elects to use a Contractor-Furnished disposal area(s), the Contractor is still responsible for developing all Government-Owned disposal areas, as listed in the bid schedule.

- 3.3.2.4 Additional Requirements for Government-Furnished and Contractor-Furnished Disposal Areas
 - a. A freeboard of two feet or more, measured vertically between the retained materials and water and the top of the adjacent confining dikes, shall be maintained at all times. If the required freeboard is not met, the Contractor shall stop pumping into the disposal area until corrective means have been taken which are satisfactory to the Contracting Officer.
 - b. Except at Biles Island, pipe type weirs will not be permitted through exterior dikes, and at no time will the dredge pipe be permitted to enter the disposal area through an exterior dike. The hydraulic placing of perimeter dikes will not be permitted. If overflow is achieved at Biles Island, the same requirements as specified in paragraph "CONTROL OF DISPOSAL AREA EFFLUENT" will apply.
 - c. Development of the Contractor-furnished disposal areas or any modifications of the Government-furnished disposal areas shall be done so as to prevent obstruction of drainage on upland areas adjacent thereto, and to leave free, clear and unobstructed outfalls of sewers, drainage ditches, and other structures affected by the disposal operations. The dredged materials shall be distributed within the used portion of the disposal areas in a reasonably uniform manner so as to permit full drainage without ponding on the fill surface during and after fill operations.
 - d. The Contractor shall ensure that all sluice boxes have structurally sound access walkways with handrails on both sides of the walkway. The walkways shall be constructed from the top of the dike to the sluices, along the frontage of the sluice structure, and along the entire length of each individual sluice box to enable the inspector to readily obtain the samples of the mixture going over the sluices as hereinafter specified. Timber used to construct the walkways shall be in accordance with the requirements for the sluice box timber.
 - e. Prior to pumping material into the disposal areas, the Contractor shall weld 1-inch diameter steel rings to the underside of the upper cross members on each end of all sluices. The Contractor shall attach a 3/8-inch steel cable to these rings which will run the length of each sluice. The cables shall be used to attach full body safety harnesses for employees working on the sluices.
 - f. The Contractor shall provide a full body safety harness for employees and Government inspectors to use during the installation and

removal of sluice boards and the taking of samples from the sluice. Each person working on the sluice will wear the safety harness and attach it to the cable installed on each sluice.

g. The Contractor shall have a minimum of 2 personnel at the disposal area when work (disposal or other) is being done at a disposal area, and a generator with a light plant sufficient to light the sluice area during darkness. The disposal area personnel shall have radio communication with the dredge at all times.

3.4 CONTROL OF DISPOSAL AREA EFFLUENT

3.4.1 General

The Contractor shall monitor disposal area conditions to preclude excessive ponding as described under paragraph entitled: "Additional Requirements for Government-Furnished and Contractor-Furnished Disposal Areas", and also to maintain effluent quality as prescribed below:

- a. Total Suspended Solids in the discharge from the dredge material disposal areas shall not exceed 8 grams/liter. Sampling shall be done daily (or once per discharge, whichever is more frequent)using an 8-hours composite sample.
- b. The pH of the discharge shall be maintained at 6 to 9 standard units at all times. Sampling shall be done once per week (or once per discharge, whichever is more frequent) using a grab sample.

Weekly hand written results are to be given to the Government Inspector on site. Three (3) copies of a report of data collected is to be provided to the U.S. Army Corps of Engineers, Technical Support Branch within 10 days after the end of each month and after the completion of dredging. Sluice height shall be reviewed by the Contractor on a continuing basis to insure that the optimum height needed to satisfy of these requirements is employed at all times. The Contractor shall be required to raise the elevation of the crest of the sluice boxes or to stop pumping into the disposal area and permit the fill to settle whenever the density and pH of samples of the mixture of suspended material and water discharged over the sluice is outside of the above stated requirements. The disposal area effluent shall be controlled at all times with the sluice boxes. This shall include disposal areas where material is being hydraulically rehandled in accordance with paragraph: "DISPOSAL OF EXCAVATED MATERIAL." Samples for density determination shall be taken, tested, and recorded by the Contractor at the sluices as often as required and at least twice daily at times when the flow is at maximum rate and after the dredge has been operating continuously for not less than the time required for solids in suspension to flow from the discharge pipe to the sluices. Minimum frequency of testing shall be increased when effluent density and/or ph increases or nears the maximum specified. Samples of the river water shall be taken in accordance with SECTION 01355 ENVIRONMENTAL PROTECTION: DREDGING. All density determinations including times of sampling shall be recorded on the Quality Control Reports required in SECTION 01450: CONTRACTOR QUALITY CONTROL (CQC).

3.4.1.1 Effluent Density

Each grab sample shall be taken from the mixture flowing over the sluice at a depth of not over two feet and shall be made up by partially filling, without overflow, a one-quart container at not less than ten different

places in the length of the sluice and combining the mixture in a bucket or other suitable container. When settled solids are not present in the sample, the density may be determined by the hydrometer method or the weight-volume method as hereinafter specified. When settled solids are present, the density shall be determined by the weight-volume method.

- a. Hydrometer Method: When the hydrometer method is used for density determination, the following hydrometer model shall be used, or equivalent: Hydrometer ASTM 152H -5/+60, manufactured by Chase Instrument Company, model 343650. The hydrometer shall be used as specified by the manufacturer and as specified herein. This hydrometer reads density directly in grams per liter.
- b. Weight-Volume Method: When the weight-volume method is used for density determination, the total sample shall be measured to obtain volume in liters and weight in grams. Measurements shall be made with a 1,000 c.c. laboratory cylinder and a scale or balance capable of weighing the sample and cylinder to the nearest gram. The unit weight shall then be obtained by dividing the total weight in grams by the total volume in liters.

3.4.1.2 Timber Flash-Boards

The Contractor shall provide prior to commencement of pumping, a sufficient number of flash-boards for the sluice boxes as required for the retention of dredged material under this contract and shall assure that the entire sluice length is effective.

3.4.1.3 Payment

All costs in connection with the construction and maintenance of disposal areas, including all required effluent control, shall be included in the contract lump sum price for Item No. 3, "Disposal Area Construction" as listed in the Bidding Schedule.

3.5 OVERDEPTH AND SIDE SLOPES

3.5.1 Overdepth

To cover inaccuracies of the dredging process, material actually removed from within the contract limits shown on the Contract Drawings to a depth of not more than 1 foot below the required depth, limited by a vertical plane through the required depth contour, will be estimated and paid for at the contract unit price.

3.5.2 Side and End Slopes

No side or end slopes are specified for this contract (box cut). Computation of payment quantities will be to the specified depth within the channel limits, except where dredging is to be performed to a distance of 25 feet outside the channel edges. This dredging shall be completed by the Contractor at locations where required dredging depths exist in a contiguous area inside the federal channel at the same stationing, unless otherwise directed by the Contracting Officer.

3.5.3 Excessive Dredging

Material taken from beyond the limits specified in paragraphs entitled: "Overdepth" and "Side and End Slopes" will be deducted from the total

amount dredged as excessive overdepth dredging, or excessive side slope dredging for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the applicable provisions of Special Clauses: "FINAL EXAMINATION AND ACCEPTANCE" and "SHOALING."

3.5.4 Acceptance Section Stationing

The Contracting Officer reserves the right to extend the stationing of any acceptance section within the contract limits to include the removal of any shoaling identified during before-dredging surveys.

3.6 ESTIMATED QUANTITIES

The total estimated quantity of material necessary to be removed within the specified limits, including allowable overdepth as previously specified, is as follows:

Station to Station	Acceptance Section	Allowable Required Dredging to 42' (CY)	Overdepth 42' to 43'(CY)
12+000 to 14+000 18+477 to 21+577 28+400 to 30+400 32+623 to 35+200 40+993 to 43+600 43+600 to 46+000 60+000 to 62+000 64+403 to 68+000 70+800 to 73+263 73+263 to 75+600 83+503 to 85+097 88+547 to 91+097 91+097 to 93+600 102+624 to 105+600 108+400 to 110+988 110+988 to 114+000 114+000 to 116+800	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1,400 18,900 10,500 12,700 21,000 19,500 9,200 30,750 9,450 21,465 6,000 34,325 25,550 16,000 36,400 37,900 17,325	2,600 10,000 6,175 9,250 11,950 11,300 4,750 13,000 8,775 20,910 2,650 8,750 8,375 8,275 8,200 9,100 12,625
114+000 to 116+800 116+800 to 119+978 119+978 to 122+778	17 18 19	17,325 14,400 40,700	7,075 9,650
		Required Dredging to 24' (CY)	
122+778 to 124+676	20	38,500	6,600
		Required Dredging to 22' (CY)	
142+000 to 144+675	21	81,700	26,400
		Required Dredging to 35' (CY)	
Turning Basin 0+000 to 0+800	22	16,800	13,100

CONTRACT TOTALS

520,465

219,510

TOTAL

739,975

3.7 LIMIT OF DREDGING

3.7.1 General

The areas to be dredged are the channel and turning basin within the acceptance sections indicated on the drawings and specified in Special Clause entitled: "FINAL EXAMINATION AND ACCEPTANCE," as defined by the dredging prism specified in paragraphs entitled: "OVERDEPTH AND SIDE SLOPES" and "MEASUREMENT AND PAYMENT."

3.7.2 Quantity Acceptance

The Contractor is responsible for clearing each acceptance section in its entirety prior to acceptance of the work by the Government. In any portion of an acceptance section where the before-dredging survey indicates dredging is required, the Contractor is responsible for removing any required material found to be remaining above the required depth by the after-dredging surveys unless such dredging is waived. Material removed as a result of redredging, within the dredging contour, will be paid at the contract unit price and quantity as determined by the difference between initial before-dredging survey and the final after-dredge survey. In any portion of an acceptance section where the after-dredging surveys indicate dredging is required that was not indicated by the before-dredging surveys, the Contractor shall be responsible for removing such material to the required depth, unless waived by the Contracting Officer. The Contractor will be paid for such work at the contract unit price and any additional quantity calculation will be made based on the after-dredge surveys, provided the material is not determined by the Contracting Officer to be misplaced material.

3.8 CONTRACTOR QUALITY CONTROL

The Contractor shall prepare and maintain Daily Report of Operations forms, and shall furnish signed copies thereof with the Daily Quality Control records required in SECTION 01450: CONTRACTOR QUALITY CONTROL (CQC) to the Contracting Officer. Copies of the Daily Report of Operations form to be used are attached at the end of this section. Further instructions on the preparation and submittal of the forms will be provided at the Pre-Dredging Coordination meeting.

3.9 MEASUREMENT AND PAYMENT

3.9.1 Mobilization and Demobilization

All costs connected with the mobilization and demobilization of all of the Contractor's dredging plant and equipment will be paid for at the contract lump sum price for this item. Sixty percent (60%) of the lump sum price will be paid to the Contractor upon completion of his mobilization at the work site. The remaining forty percent (40%) will be included in the final payment for work under this contract.

In the event the Contracting Officer considers that the amount in this item (60%) which represents mobilization, does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer may require the Contractor to produce cost data to justify this portion of the bid. Failure to justify such price to the satisfaction of the Contracting

Officer, will result in payment of actual mobilization costs, as determined by the Contracting Officer at the completion of mobilization, and payment of the remainder of this item in the final payment under this contract. The determination of the Contracting Officer is not subject to appeal.

All costs connected with the mobilization and demobilization of the Contractor's dredging plant and equipment as defined below shall be included in the contract lump sum price for Bid Item No. 1, "Mobilization and Demobilization" as listed in the Bidding Schedule.

- a. Mobilization shall include all costs for operations accomplished prior to commencement of actual dredging operations; i.e., transfer of dredge, attendant plant, and equipment to site; initial installation of pipe; and other incidentals in advance of the actual dredging operations.
- b. Demobilization shall include general preparation for transfer of plant to its home or standby base, removal of pipelines, cleanup of disposal area including the removal and disposal of all tires and trash/debris resulting from the dredging operation, seeding and mulching as specified in SECTION 02935: SEEDING AND MULCHING, and transfer of plant to its home or standby base.

3.9.2 Dredging

The total amount of material removed and to be paid for under the contract, will be measured by the cubic yard in place. Measurement of the number of cubic yards in place will be made by computing the volume between the bottom surface shown by soundings of the last survey made before dredging and the bottom surface shown by the soundings of surveys made as soon as practicable after the work specified in each acceptance section has been completed. The volume for measurement will include the material within the limits described in paragraph: "OVERDEPTH AND SIDE SLOPES," less any deductions that may be required for misplaced material described in paragraph entitled: "DISPOSAL OF EXCAVATED MATERIAL", of this section. The volume of material removed will be generated by using either the Average End Area Method or by the TIN (Triangulated Irregular Network) computation, as outlined in the Hydrographic Surveying Manual EM 1110-2-1003, dated 1 January 2002. All depths obtained from single beam surveys will be utilized for volume computation purposes. If multi-beam survey technology is used, a 5-foot by 5-foot matrix using the sounding closest to cell center (shot depth) will be generated from the edited multi-beam data to perform the TIN volume computations. The corresponding plottted sounding sheets soundings will be generated using a cell size for their matrix that is plot-scale dependent utilizing the sounding that is closest to cell center (shot depth) shifted to the center of the cell from the edited multi-beam data. The contour for the plotted sheet will be generated by using a 5 foot by 5 foot matrix using the sounding closest to cell center (shot depth). If the material to be dredged in the contract is categorized to be hard bottom the matrix used for the volume computationss and plotted contours will be reduced to 3 foot by 3 foot and an average of the soundings in the cell will be used. All raw survey data and data used for the volume computations shall be available to the Contractor upon request. Payment for dredging will be made at the contract unit price for Bid Item No. 2, "Removal and Satisfactory Disposal of Material" as listed in the Bidding Schedule.

3.9.2.1 Surveys for Acceptance

The Contractor shall notify the Government of his need for acceptance surveys at least three days in advance of the date for each survey (Saturdays, Sundays and holidays are excluded), and shall confirm his need by telephone between 0730 and 0800 hours on the day of each survey by calling 0 & M Contracts Branch at (Area Code 215) 656-6750. The Contractor shall schedule the before-dredging survey for an acceptance section within 2 weeks of the expected start date of dredging operations. Only one before-dredging survey will be provided for each acceptance section. The time for any redredging to remove shoals and for second and subsequent surveys in any contract area is the responsibility of the Contractor, and must be accomplished within the completion period. The Contractor may accompany the survey party to determine whether he, at his own election, will perform redredging. The Contracting Officer will notify the Contractor if any redredging is required.

3.9.2.2 Existing Conditions

The drawings as listed under Special Clause: "CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS" are believed to accurately represent conditions existing at the time indicated, but the depths shown thereon will be updated as required by soundings taken prior to the commencement of dredging. Determination of quantities removed and the deductions made therefrom to determine quantities by place measurement to be paid in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

3.9.2.3 Hydrographic Survey Equipment

Hydrographic Surveys will be conducted to meet USACE Performance Standards as defined in the Hydrographic Surveying Manual EM 1110-2-1003 dated 1 January 2002. Surveys will be performed by single transducer sounding techniques, multi-beam sweep type suveys or both. Bottom soundings will be obtained by the single beam fathometer operating at a frequency ranging from 190 to 210 Khz. When utilizing multi-beam technology, the operating frequency will range from 180 to 250 khz. All fathometers will be calibrated following procedures outlined in the aforementioned EM.

3.9.2.4 Partial Payments

Monthly partial payments will be based on acceptance sections completed as determined by soundings or sweepings taken behind the dredge by the Government survey party.

-- End of Section --

	DAILY REP	DAILY REPORT OF OPERAT	RATIONS		CONTRACT NO.	DATE	RCS ENGKW-31
DREDGE					CONTRACTOR		
LOCATION OF WORK		Range, Stationing, L	(Range, Stationing, Longitudinal Position)		_	CHARACTER OF WORK	F WORK
DISPOSAL AREA OR REHANDLING BASIN	REHANDLING	BASIN			LENGTH OF DISCHARGE OF PIPELINE: Pontoon Ft. Shore Ft.	Total Length Submerged	نير
CHARACTER OF MATERIAL AND PERCENTAGE OF EACH Gravel	TERIAL AND PI	ERCENTAGE OF	ЕАСН				
AGE DEPTH	(Feet and Tenths)	hs) After Dredaina	o ii	Pavm	Payment Denth	WEATHER	
NUMBER OF MEN	2	MAN HOURS	6			MAN HOURS TO DATE	O DATE
	MC	WORK PERFORMED	0		DISTRIBUTION OF TIME	N OF TIME	
ITEM	<u></u>	LINI	LAMOUN	Ц	EFFECTIVE WORKING TIME	HOURS	MINUTES
			GROSS	NET	Dredging		
Av. width of cut		Feet			Percentage of total time		
Area dredged		Sq. Ft.			NON- EFFECTIVE TIME		
Distance advanced this period	period	Feet			Handling pipe lines		
Distance advanced previously	lousiy	Feet			Handing swinging intes Clearing pigms and pipe line		
Amt. dredged this period	P	Cu. Yds.			Clearing cutter or suction head		
Amt. dredged previously		Cu. Yds.			Changing location of plant on job		
Total amt. dredged to date	ate	Cu. Yds.			Loss due to opposing natural elements <8hr		
	— i				Loss due to opposing natural elements >8hr		
	A	A I I ENDAN I PLAN I	_		Loss due to passing vessals		
ITEM		NAME		HOURS	Minor operating repairs <4hr		
Tugboat					Secure for weekend		
Tugboat					Miscelaneous (Explain in remarks)		
Launch					Total Non-effective Time		
Barges					LOST TIME NOT CHARGEABLE		
Scows					Loss due to repairs >4hr		
Derrick					Loss due to laying /relaying submerged line		
	COMM	COMMODITIES CONSUMED	JMED		Lay time off shift		
ITEM	UNIT		QUANITY		Sundays and Holidays		
Fuel oil	Gals.				Waiting for equipment plant		
Lubricants	Gals.				Collisions		
Lubricants	Pounds				TOTAL TIME IN BEBIOD		
No. of Supervisory Inspections:	ctions: By field personnel	ersonnel		BV	office personnel		
REMARKS (Att.		et, if necesary)					

SUCKET OR DIPPER DREDGE (only)							TIDE DATA (all dredges)													
SCOW				TI				c	J8 IC	YARDS	STAGE	TIME				SLAC	: K			
		START		FINE	SH	L	OAD I NO	<u> </u>			H.W.		hrs							
			工					\bot			L.W.		hrs.							
			$oldsymbol{\bot}$								H.W.		hrs.							
			工			Γ		\bot			L.W.		hrs							
			$oldsymbol{\bot}$			\Box		\bot			LOCATION	N OF TIDE	E GAGE							
			工			I		工			1									
			$oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$			Γ		工			1									
			\bot			\Box		$oldsymbol{ol}}}}}}}}}}}}}}}$			L	70 65 E		1 200			,	6		
			工			Γ		工			AV. DEP	TH BEFORE	. DREDG	I #G	AV. DE	EPTH 1	AFTER	CREC	IG I NG	
			\bot			匚		\bot			<u></u>				1	· · · · ·			-	
			工			匚		\bot			MIN. DE	PTH AFTER	V DREDG	ING	MAX. C	JEPTH	AFTE	R DRE	.DG i NC	i
			工			\Box		\bot		لــــــــــــــــــــــــــــــــــــــ	<u></u>				1					
			工			\prod		\bot		لّــــ	LENGTH (OF CUI		1	WIDTH	OF C	υT			
			工			厂		$oldsymbol{\perp}$							<u> </u>					
NO. OF				T			SOUN				NO. OF		1	1	1			ID I NGS		
MOVE OR SOUNDING	DETANCE	TIME	TID	E			er -					DISTANCE	TIME	TIDE			per -			
SOUNDING			<u></u>	\bot	Lon	er -	Redu	ced 1	0 M. I	w.	BOUNDI 4G	<u> </u>		+	1 Lo	wer -	Redu	ced t	0 M.L	W.
			_	T	7			1	-	1 1	1	(]	1	1	1	1	! 1	1	1 }	
L		I							<u></u>		<u> </u>			+	+	 				<u> </u>
				T	\Box		آا	匚	سَــا	تـــا	1 1	(Ì	I	l	-					<u> </u>
L			<u> </u>		\Box		لي	<u> </u>		لــــا	 			+	+	-		-	نــــا	<u> </u>
1	1	1	1	T			تـــا	<u></u>	نَـــا		1	1 1	1		-	-			<u> </u>	<u> </u>
 _			<u> </u>					<u> </u>	ــــــــــــــــــــــــــــــــــــــ	آـــا	 	1	<u> </u>	+	+-	-	 		<u> </u>	<u> </u>
1		-	_	I			نَــا	ـَــا	ـــــا		1	1	ļ	1	-	1		-	<u> </u>	<u> </u>
		<u></u>	<u> </u>	\bot			لَـــا	ـــــا	<u> </u>	لـــا			<u> </u>	+	-	-	-	-	-	<u> </u>
			1	I			سَا	oxdot	<u> </u>	نـــا	1	1 1	1		-	-	-	-		
	<u> </u>			\bot			ــــا						<u></u>	+	+-	-	-	<u></u>	<u></u>	<u> </u>
			_	I					-	1	1	1 1	Ī	I	—	-	<u></u>	<u></u>	<u> </u>	
			<u></u>						<u></u>	نـــا		<u></u>	<u> </u>	+	+	-		<u></u>	<u></u>	
	1			I				<u> </u>			1	1	1	1	<u> </u>	-			<u> </u>	
				[<u></u>	نب			<u> </u>	+	+	-		-	<u> </u>	
	1			I				<u> </u>			1	1	1	1		-			<u> </u>	
								<u> </u>	1				<u> </u>	+	+	-	<u> </u>			
	1			I			ـــــا	<u></u>	<u></u>	نــــا	1	()	Ţ	1	-	<u> </u>	-			<u> </u>
				\bot			<u> </u>			نــــا			<u></u>	+	+		-	-	<u> </u>	
			_]		<u> </u>	<u></u>	<u></u>	-	†	1	1	1	-	 	-			-
			<u> </u>	\bot			<u> </u>	<u></u>				-	<u> </u>	+	+-	 				-
						<u> </u>	<u></u>	<u></u>		-	1	1	1	1	-	-		-		-
							<u> </u>	<u></u>		-	<u></u>			+	+	 		-	-	-
			1	L		1	<u></u>	<u></u>	+-	-	1	1	1	1	-	-	+	-	-	
				_			 	 	+-	-		-		+	+-	+	+-	+	-	\vdash
	l	1	1	L		<u> </u>	<u> </u>	<u> </u>	+	-	1	1	1	1	-	+-		+-	-	
			 	_		<u> </u>	-	 	+-	-	-	-	-	+	+	+	 	+-		
			1	L		<u> </u>	-	 	+-		1	1	1	1	-	 	+	+	 	+
		 	—	\dashv	\longrightarrow	ļ	 	-	+-	+	 	 		+	+-	+	 	 	 	1
1	1		1	1		<u> </u>	 	-	+-	+-	1	1	1	I	 	+-	+-	 	 	
	<u> </u>	-	 	\dashv		 	+	-	+	+	 	 		+	+-	+	\dot{T}	 	\vdash	1
1	1	1	1	ŀ			+	-	+	+-	1	1	1	l	-	+-	 	 	 	
	 	 	 	\dashv			+	+-	+-	+-		+	 	+	+-	+	t	 	 	T
1	1	1	1	-			+	+-	+-	+	1		1	1	 	+	+-	+	 	+
		 	 	-	-		+	+-	+-	+	+	+		+	+-	+	 	+	+-	1
1	1	1	l	-			+	+-	+	+	1		1	1	—	+	+	+	1	
	<u></u>	<u> </u>	<u> </u>					<u> —</u>						14TF	—					
SUBMITT	EU BY						TITLE	•					- 1	DATE						
1																				

DAILTR	EPORT OF OP	ERATIONS -	E O P	PER DREDGE	s		LEPO	RIS CON	TROL STOROL			
DISTRICT												
EXACT LOCATION O	7 WORK			T		DATE						
				MAINTENANCE	3							
				NEW HORK		RINIBER	OF PERSONS	DE CREW				
	N.					l						
Av. Length of Cu	t Ft.	CHAR	ACTER OF	MATERIAL		Bopper	Capacity		Cu. Yds.			
Av. Width of Cut					Liter		. of Residu	al	Cu. Yds.			
Av. Dist. To Dis		Density of Water		QS/Liter At	۴	Av. Onf	illed Capac	ity	Cu. Yds.			
Navigation And O	ther Dredging Aids (Describe and include	e states	ment on Adequacy as	d Lec	omendati	ons)					
	WORK	PERFORMED			DEAF	T FOR LOA	D Et.	(for one load only)			
	DREDGING & BAULING			AGITATING			LIGHT		LOADED			
No. Of Loads	Total Cu. Yds. Delivered	Disposal Area Mooring Locat	on	Tot. Cu. Yds.	Porv	erd						
					Aft							
					Drag	Depth	<u></u>	Max.	Min.			
							st Checked	0 12				
				<u> </u>		Ejectors	Used		I of Pumping Time			
		EUTION OI	F TIME AND MILES NO									
EFFECTIVE WORKING TIME				AGITATING (Hinutes)	DEE	DGING AND (Minute			MILES NUM Stat. Hiles)			
Pumping												
Turning												
To and From Di	sposal											
	udes Docking, Pumpin											
TOTALS												
NON-EFFECTIVE WO Taking On Fuel					_							
To And From Wh	arf Or Anchorage											
Loss Due To Na	tural Elements											
Loss Due To Tr	affic And Bridges											
Loss Due To Mo	oring Barge											
Minor Operating Repairs												
Transferring B	etween Works	<u> </u>										
Lay Time								<u> </u>				
Fire And Boat Drills												
Miscellaneous			+		<u> </u>							
TOTALS			+		<u> </u>							
LOST TIME Hajor Repairs And Alterations					├							
Hajor Repairs And Alterations Cassation			+									
Collisions			+		\vdash			 				
TOTAL LOST TIM	· · · · · · · · · · · · · · · · · · ·		+		-			 -				
TOTAL TIME IN PE			+		_							
	AVERAGE SPEED OF DE		HUNUTES RADAR IN	USI			L					
AVERAGE SPEED OF DEEDGE Feet/Him				Tide Data Was Obt		By Heans	Of					
Loading				Length of Pipelin				Peet				
Agitating				Weather								
Gals. Of Fuel Oi	1 Consumed			NUMBER O	7 135	PECTIONS	BY SUPERVIS	ORY PE	SOMMEL			
Gals. Of Water C	onsumed			Field			Office					
REMARKS												
									•			
SUMMITTED BY												
!												

									AND BAI						
Average ECONOPIC LIAD DATA	TIME	PUNO?	-	T		HOON	ntes		T			BIC YAR	3	d th	
Average ECOMMIC LOAD DATA	Started	Stopped	Framb ing	Turning	To	Docking *	Pumping Out	Undocking	To Cut	Total Tim	Delivered	Free Dumped	Residual	Drag De While Los	HATE A DRAGTENI
Average ECOMONIC LOAD DATA						-									
ECOMONIC LOAD DATA														·	
umping Time (Minutes) Economic Load (Cu. Yds.) Test Load No. Date of Test	Aver	age													
	Tim (Minutes	,	Economi	c Load	(Cu. Yd	S.)	Test L	ad No.		Date of	Test	1		

SECTION 05900

SLUICE BOXES AND OUTFLOW PIPES

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of providing all labor, materials, plant and equipment and performing all operations required for the fabrication and installation of sluice boxes and outflow pipes specified herein and shown on the drawings.

1.2 REFERENCES

The publications listed below form a part of these specifications to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC S 329	(1985) Structural Joints Using ASTM A325 or A490 Bolts
AISC S 335	(1989) Structural Steel for Buildings

ASTM INTERNATIONAL (ASTM)

ASTM A 6	(1993) General Requirements for Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use
ASTM A 36	(1993)Structural Steel
ASTM A 139	(1993)(Grade B) Electric-Fusion (ARC)-Welded Steel Pipe (NPS 4 and over)
ASTM A 325	(1993) Structural Bolts, Steel Heat Treated
ASTM A 370	(1987) Test Methods and Definitions for Mechanical Testing of Steel Products

AMERICAN WELDING SOCIETY (AWS)

AWS A 5.1	(1991) Carbon Steel Electrodes for
	Shielded Metal Arc Welding

AWS D 1.1 (1994) Structural Welding Code

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI B 46.1 (1985) Surface Texture (Surface Roughness, Waviness and Lay)

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT)

PennDOT Specifications 2000 Edition

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

NOTE: Any submittals classified as "SD-01 Preconstruction Submittals" are submittals required to be submitted to, and approved by, the office indicated prior to mobilization to the contract work site. All other submittals, classified as "SD-02" through "SD-11," shall be submitted to, and approved or reviewed by, the office indicated prior to commencing the particular task to which the submittal is associated.

SD-01 Pre-Construction Submittal

Sluice Box and Outflow Pipe Workplan; G COR.

The workplan shall include detailed descriptions, drawings, calculations of the methods, materials, and equipment to be used for the fabrication and installation of the sluice boxes, outflow pipes and for the wooden access walkways to and around the sluice boxes. The Contractor's work plan and shall be submitted for approval prior to the commencement of work specified in this section. The submittal shall be sent to:

SD-07 Certificates

Any certificates required for demonstrating proof of compliance of material with specification requirements shall be executed in triplicate copies. Each certificate shall be signed by an official authorized to certify on behalf of the manufacturing company and shall contain the name and address of the contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the contractor from furnishing satisfactory material, if after tests are performed on selected samples, the material is found not to meet the specific requirements.

Outflow Pipe; G COR.

Manufacturer's certification of the chemical composition and Brinell Hardness shall be furnished for approval prior to delivery.

Structural Steel; G COR.

Certificates of compliance and copies of mill test reports shall be furnished for structural steel.

Quality Assurance for Welders; G COR.

Certificates of approved qualification as specified in this specifications.

1.4 QUALITY ASSURANCE

All welding shall be accomplished by experienced welders who have

successfully passed an approved qualification test. For the purposes of this specification, an approved test is one that is recognized by the U.S. Coast Guard, U.S. Navy, American Bureau of Shipping, or a technical society such as the American Society or Testing and Materials or the American Welding Society.

1.5 HANDLING

The sluice boxes and outflow pipes shall be furnished and transported to the respective job sites by the Contractor. The Contractor shall be responsible for providing all equipment and labor and incurring all related expenses for transporting the sluice boxes and outflow pipes to the site of the work.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Outflow Pipe

Outflow pipe from each sluice box shall be 30-inch I.D. (nominal) steel pipe with a minimum wall thickness of 3/8", in accordance with ASTM A 139, Grade B. The steel shall have a minimum Brinell Hardness of 170, determined in accordance with ASTM A 370. This steel is known as "Abrasion - Resistant Steel" or "Special Analysis Steel".

2.1.2 Structural Steel

Structural Steel for sluice boxes shall conform to ASTM A 36.

2.1.3 Welding Electrodes

Welding Electrodes shall be compatible with the parent metal, conforming to the appropriate AWS Specification.

2.1.4 High-Strength Bolts

High-strength bolts, including nuts and washers, shall conform to ASTM A 325.

2.1.5 Bedding Material

Bedding material shall be crushed aggregate meeting the requirements of Subsection 703.2 of the PennDOT Specifications. It shall have a gradation designation of No. 2A as specified in Subsection 703.2 (c), Table C of the PennDOT Specifications.

2.1.6 Weighting Stone

Standard Coarse Aggregate AASHTO #1 in accordance with Table C in subsection 703.2(c) of thePennDOT Specifications.

PART 3 EXECUTION

3.1 FABRICATION

3.1.1 Sluice Fabrication

Sluice fabrication shall be in accordance with the applicable provisions of AISC S 335 and the drawings. Welding shall be in accordance with AWS D 1.1. High-strength bolting shall be in accordance with AISC S 329. Fabrication and assembly shall be done in shop. Compression joints depending on contact bearing shall have a surface roughness not in excess of 500 micro inches as determined by ANSI B 46.1 and ends shall be square within the tolerance for milled end in accordance with ASTM A 6. The Contractor shall be responsible for all errors of detailing, fabrication, and for the correct fitting of the structural members.

3.1.2 Outflow Pipe Fabrication

Welding of outflow pipe shall be by machine or manual electric arc welding process. Prior to welding, all pipe seams shall be prepared to result in 100% weld penetration. Electrodes used for welding shall be compatible with the parent metal. Pipe sections shall be spiral welded or girth and longitudinal seam welded. The latter type shall have no more than one girth and one longitudinal seam for each section and shall be of the butt joint type. The longitudinal seam shall be aligned for the entire length of the pipe section.

3.2 SURFACE PREPARATION

3.2.1 Clearing and Grubbing

The area shall be cleared and grubbed as specified in Section 02230 $^{\circ}$ CLEARING AND GRUBBING".

3.2.2 Excavation

Excavation for the sluice boxes and outflow pipes, regardless of the material encountered, shall be to the elevations indicated on the drawings or as directed by the Contracting Officer. Excavations carried below the grades indicated, without specific directions, shall, except as otherwise specified, be refilled to the proper grade with satisfactory material as directed. All additional work of this nature shall be at the Contractor's expense. Excavation shall be performed in a manner and sequence that will provide drainage at all times. The excavation shall be of sufficient size to allow proper installation of outflow pipes while maintaining safe side slopes to permit satisfactory backfill and compaction of excavation. Excavated material shall be stockpiled at a distance from the banks of the trench equal to 1/2 the depth of the excavation, but in no instance closer than 2 feet.

3.2.3 Compaction of Foundation Areas

The foundation area for these structures shall be compacted in accordance with Section 02212: DIKE EMBANKMENT.

3.3 INSTALLATION

3.3.1 Sluice Boxes and Outflow Pipes

The Contractor shall install the sluice boxes and outflow pipes to the lines and grades shown on the drawings. All field welds and connections shall be water-tight and in accordance with AWS D 1.1, or as directed by the Contracting Officer. The sluice boxes shall be rigidly interconnected as shown on the drawings in such a manner as to eliminate differential settlement and independent lateral movement. The entire length of each

sluice box shall be weighted with 12 inches of PennDOT No. 1 stone to assist in the prevention of uplift. The sluice boxes shall be installed within a tolerance of 0.1 feet of the grade elevation shown on the drawings. Inspection and approval by the Contracting Officer shall be required prior to backfilling.

3.3.2 Backfill and Compaction of Fill Material

After inspection and approval of the sluice boxes and outflow pipes by the Contracting Officer, satisfactory fill material as defined in Section 02212 DIKE EMBANKMENT shall be placed and compacted in 12-inch layers around the outflow pipes within the disposal area. The material shall be placed and compacted so as to obtain a density equal to the adjacent undisturbed foundation or embankment material up to an elevation of 3 feet above the crown of the pipes. Construction of the dike embankment above this elevation shall be as specified in Section 02212: DIKE EMBANKMENT for the appropriate dike sections shown on the drawings.

3.3.3 Backfill and Compaction of Native Material

From the exterior toe of the dike embankment to the location shown on the drawings, the excavated native material will be backfilled and compacted around the outflow pipes as described in the paragraph "Backfill and Compaction of Fill Material". The ground surface will be brought back to its original grade. Where the outflow pipes undercut an existing gravel or soil access road, the outflow pipes shall be laid on one foot of PENNDOT 2A coarse aggregate bedding along the entire width of the excavation prior to backfilling.

3.4 MEASUREMENT AND PAYMENT

3.4.1 Sluice Boxes and Outflow Pipes

The work specified in this section for sluice boxes and outflow pipes will not be measured for payment and all costs in connection therewith shall be included in the contract lump sum price for the appropriate items under Bid Item No.3 "Disposal Area Development Construction".

-- End of Section --